The Ryedale Historian

Number 20

2000-2001

Helmsley Archaeological and Historical Society

Notes

Cover Illustration. Rievaulx Abbey fifty years ago. John Collier Collection. Reproduced by kind permission of Helmsley Parish Council.

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Editorial

Numbers rule: witness the fact this is the 20th issue of the Ryedale Historian, journal of Helmsley Archaeological and Historical Society which celebrates its 50th anniversary on 5 December in the year 2000. To mark all three occasions the Historian has more pages than usual and, for the first time, some illustrations in colour and a printed index. Since its first issue in 1963 most have been supported by grants from the North York Moors National Park and Ryedale District Council; this year is no exception and we must once again express our sincere thanks.

The picture of Rievaulx Abbey on the cover was taken from a slide in the collection of the late John Collier who was one of the founder members of the Society. A forester, working on the Duncombe Park estate, he was the Society's projectionist for many years. During that time he preserved a large number of illustrations of local events and places - including rare photographs taken towards the end of the 19th century. On his death he left them to Helmsley Parish Council which hopes to mount an exhibition of them at a future date.

'And the abbeys is (sic) one of the splendours of the realm' wrote the leader of the Pilgrimage of Grace, Robert Aske, shortly before his execution in 1537. His offence had been to mount a rebellion in the North to prevent the dissolution of the monasteries ordered by the King, Henry VIII. Though ruined they are still splendid, none more so than Rievaulx, whose situation within walking distance of Helmsley made it one of the Society's first objects of study in the early days. The work of John McDonnell, Tony Pacitto, the late R.W. Crosland and the late John Weatherill began to throw light on hitherto obscure corners of the Abbey's past. Now their names appear in the bibliography of the formidable and scholarly account published in 1999, 'Rievaulx Abbey Community, Architecture, Memory' by Peter Fergusson and Stuart Harrison with contributions from Glynn Coppack.*

The Society's connection with Rievaulx was also recognized by an invitation to comment on the report commissioned by English Heritage from Caroe and Partners, Chartered Architects of London. This addresses the issue of facilitating public access to the Abbey and enlarging knowledge of its history while preserving the sense of peace and isolation that – remarkably – endures though it is more than 850 years since the Cistercians chose to build their monastery in the wild and remote valley of the River Rye.

All parties recognize that this will not be easy. The Secretary wrote to Caroe and Partners as follows;

'... Members' comments generally approve the plan's positive approach. There is, however, concern that English Heritage's presentation of the site might become too elaborate.

'It is hoped that maximising visitor numbers will never become an objective. Extension of parking space for cars and coaches would be a disaster.

'I send you the Society's overall view. It may be that individual members may wish to comment further.

Yours sincerely,
J.G. Smith.

In his response on behalf of Caroe and Partners Mr A.L. Gibb promised to pass on the Society's concern to English Heritage. When the final draft of the conservation plan appears the Society will be able to comment further. In the meantime members who wish to discuss the plan are invited to contact Mr Gibb at 1 Greenland Place, London NW1 0AP.

Anne Taylor

*Yale University Press for the Paul Mellon Centre for Studies in British Art £60

Ryedale archaeology at the Millenium

Philip Rahtz writes;

Archaeology and local history flourish. The Helmsley Archaeological and Historical Society has a record membership of about one hundred and an impressive programme of lectures and excursions; the Society has in recent years sponsored several projects of fieldwork and excavation. There have been four public lectures at the Old Meeting House about aspects of archaeology which have all been very well supported.

In the annals of North Yorkshire archaeology Ryedale has not had a long history of intensive work. The great archaeologists of former years - Greenwell, Mortimer, Atkinson, Elgee and, more recently, Hayes, Brewster, Spratt and others have tended to work on the North York Moors or the Wolds. The general state of Yorkshire archaeology was summarized for the first time in the Elgees' invaluable contribution to the County Archaeology series. (Elgee and Elgee 1933). In their Gazetteer of the old North Riding of over 150 entries, only a dozen relate to Ryedale. In contrast, in the lower part of the Vale of Pickering east of Pickering and Malton, there has been important work on the early settlement pattern (including the world-famous Star Carr) and the prehistoric, Roman, and Anglo-Saxon landscape study at West Heslerton by Dominic Powlesland - surely the largest excavations ever done in Yorkshire?

It is not that there is less archaeology on the ground in Ryedale and the neighbouring parts of the Howardian Hills, but that there have been fewer archaeologists in this area. But there is one landmark for our area which sought to rectify gaps; this was the seminal synthesis, edited by John McDonnell in 1963, with major contributions by Raymond Hayes and Tony Pacitto (McDonnell ed. 1963) This has remained a fundamental text for our Society down to the present day.

The villages round the perimeter of the Vale are relatively well known for their standing buildings: churches and vernacular architecture; but what lies beneath them and in the deep alluvial deposits in the Vale is largely terra incognita, both in terms of settlements and cemeteries. There is an enormous potential here, notably in the uncharted regions of the Howardian Hills and the many square kilometres of raised areas in the Vale, villages such as Great Barugh.

Of major importance are the thousands of aerial photographs of crop and field marks taken by the Royal Commission on Historical Monuments, England (RCHME) and by other flyers, notably Tony Pacitto. These photographs exist as prints, both in colour and monochrome, and colour slides. Sadly they can only be consulted by visiting the National Monuments Record at Swindon. The data on the photographs have not yet been plotted on to maps, or their significance discussed. Such an intensive study has recently been completed as a fine volume of RCHME for the Wolds, largely written by Cathie Stoertz (Stoertz 1997). We can only hope that the merger of RCHME with English Heritage, with a regional office in York, will ultimately result in a similar study of our area.

The York Archaeological Trust (YAT) and the Department of Archaeology, University of York have made some progress towards the understanding of the hinterland on which York depended. In the planning sector the county nucleus is at distant Northallerton, but there is very effective archaeological monitoring and research for the North York Moors National Park under Graham Lee, luckily based at Helmsley.

What we do have is a very large interested public for both archaeology and history, mushrooming in recent decades, thanks,largely, to adult education and television, notably Time Team. While membership of the Society is largely recruited from senior age groups, there are fortunately now some younger members, and more should accrue from an increasingly historically - aware school population. There are great opportunities in the new millenium for the next generation to be involved in fieldwork, documentary study and excavation. An outstanding tool, apart from the study and collation of the results of aerial survey, is geophysical prospecting, pioneered in our area by Tony Pacitto. This is relatively inexpensive, apart from the initial cost of sophisticated modern equipment, and is non-destructive. This, coupled with systematic field-walking, could enormously increase our understanding of many sites. If I were asked to sponsor one field approach for our Society in the immediate future, it would be this.

Cawthorn Camps; Trial Excavations 1999

An Interim Report by Pete Wilson, Archaeologist, English Heritage Centre for Archaeology and Graham Lee Archaeological Conservation Officer, North York Moors National Park

Introduction

Following Richmond's excavations in the 1920s (Richmond 1932) Cawthorn Camps became a type-site in Romano-British archaeology. Richmond saw it as a complex of practice works of two phases that had 'no connection with the permanent occupation of Yorkshire' and suggested that earthworks A and D were unfinished (ibid,78) However in recent years the site has undergone a review, initially as a result of the work of the (then) Royal Commission on Historic Monuments of England (RCHME) and more recently by the site owners, the North York Moors National Park. The RCHME work led them to think that only Camp C could truly be regarded as a camp, with 'Camps' A and D representing forts, and 'Camp B' an annexe attached to Fort A (Welfare and Swan 1995,137-42). The North York Moors National Park has further reviewed the site and developed a revised relative phasing of the earthworks as well as questioning a number of Richmond's interpretations of the remains he encountered (Lee1997; 1998-9). The later report is in Ryedale Historian19 and readers are referred to it for further details of Lee's ideas. For the last two years the National Park has been funding topographical survey on the site concentrated on Fort A and Annexe B, this work is being undertaken by Ed Dennison Archaeological Services.

The excavations were undertaken to assess the potential of the site; to address a range of academic and management issues, as well as allowing further refinement of the information that is available to visitors and others interested in the site. The work was small scale and intended to establish the state of preservation of the earthworks, and the quality of the data they might reveal, while having minimal impact on the site.

As part of the current project, and in addition to the work described below, York based members of the English Heritage Aerial Survey team are undertaking plotting of the air photographs of the site. Prior to the excavations magnetometer surveys of part of Annexe A and Fort D were undertaken by the Landscape Research Centre with funding from the English Heritage Centre for Archaeology.

The Trial Excavations

In cooperation with the North York Moors National Park the English Heritage Centre for Archaeology undertook a four week season of excavations within Annexe B (Trench 1), on the defences of Fort A (Trench 2) and in the area between Fort A and Camp C (Trench 3). The three trenches (Fig.1) addressed different aspects of the site's history and will be described separately.

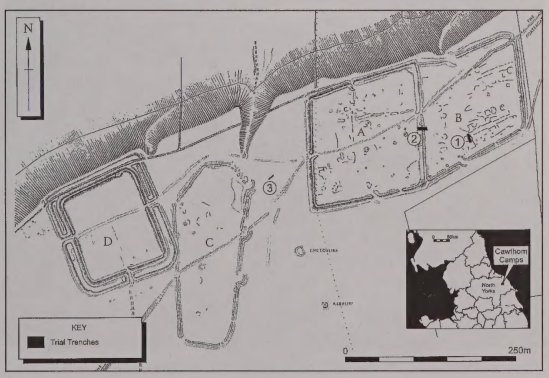

Fig 1. Cawthorn Camps showing the location of the trial trenches.

Trench 1

A 14 x 4m trench aligned north-south was excavated across one of the earthworks of which Richmond states that ' many were examined before it was possible to secure a good example' (Richmond 1932,58). He concluded that they ' were once related to tents or rough buildings' (ibid,59), although he goes on to say that:

> 'it is not clear that at Cawthorn these turf mounds ever formed the walls of buildings...it seems clear that these lines of turf have to be considered rather as screens against wind, or dams against wet,...and that they were arranged round tents or campfires, or even inside tents serving as benches or tables...Fortunately, there can be no question of their Roman date. They occur only inside the camps, and they are carefully orientated with them. One (in Annexe B) was connected with a stone oven...of...Roman character; others border the Roman streets; finally...one of them (in Fort A) screened a pit and supported a fire-back with which was connected a characteristic group of Roman sherds (ibid, 60-61).

There are basically two large groups of earthworks that appear to line 'streets' or holloways, one near the north-eastern corner of the annexe and a better preserved group near its southern entrance. There are also the isolated earthworks within the annexe, particularly on its western side.

The earthwork investigated this year lies within the group near the southern entrance to the annexe, in the area recently resurveyed by Ed Dennison. It appears to have largely escaped Richmond's attention, despite being clearly marked on one of his plans (ibid, fig.2 - where it is shown as a double square). This structure lies at the western end of the 'street', on the south side, and projects north into its line, causing a slight narrowing. It also appears slightly different in character, and on a different (north-south) alignment, to the rest of the earthworks in this group. It may thus pre - (or, potentially, post-) date the remainder of the group. If the former, than the street may have been oriented on it when laid out.

The northern element of the earthwork was opened-up, with the trench extending beyond the northern mound into the area of a holloway, presumably one of Richmond's 'Roman streets', and south into the southern part of the feature (Fig.2). A Richmond trench was encountered on the southern side and

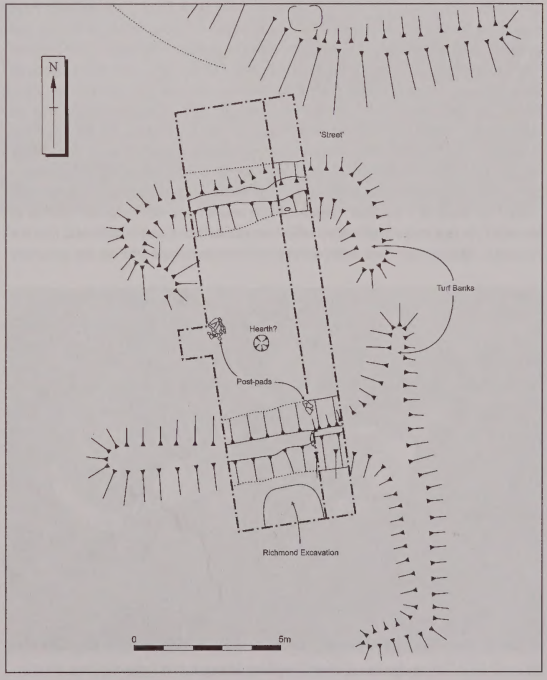

Fig 2. Plan of the turf building in Annexe B.

he appears to have excavated a shallow pit with a curved northern edge and a possible post-hole in its base. It is likely that this feature represents one or another of Richmond's 'officers' dug-outs', or possibly his Pit B1. The latter feature apparently should lie some 6m to the south-west, but given the small scale of Richmond's plans and some uncertainties regarding their general accuracy, such an error could be expected.

Plate 1 Section through the southern turf mound of the building in Trench 1.

The excavation did not take in the eastern and western banks of the feature given the need to balance the objectives of the excavations against their impact on the site. The southern turf mound was shown to be the best preserved, surviving to a height of 0.35m., with clearly defined turves visible within it (Plate 1). It was 1m wide, with clear evidence of the material that had eroded off to either side. The northern mound was less well preserved, surviving to 0.25m, with less clear evidence of turves. Between the mounds layers were recognised, although nothing that could be regarded as a conventional earth or clay floor. However it would appear certain that the feature was a structure as two post-pads were found. As initially revealed these consisted of flat laid stones that would have supported timbers which, in turn, would have supported the roof. The turf walls, which the mounds clearly were, could not in themselves have carried the full weight of the roof as they would have had little structural strength. However the roof would presumably have rested on them and extended slightly outside the structure to shed rain and prevent as much as damp as possible from penetrating the wall. Once the roof was removed or collapsed the walls would rapidly succumb to erosion, as clearly demonstrated in the sections recorded, making the survival of these structures at Cawthorn all the more remarkable. One of the post-pads was set into the southern turf wall, while the second was located in the centre of the building. The latter feature proved to be of two phases the earlier one taking the form of a dump of clay that had been burnt in situ and provided a sample for archaeomagnetic dating (Plate 2). The post-pad set into the southern wall sealed the base of a pot that contained soil and a lump of charcoal. The fill of the pot is being excavated under laboratory conditions and it is hoped that the charcoal, along with four other samples from elsewhere within the structure will be suitable for AMS (carbon 14) dating. Close to the central post-pad a shallow circular feature, c. 0.5m in diameter may have represented a small hearth. Internally the building was 7.3m north-south and c8m east-west.

In addition to the pot from the post-pad a further half-dozen sherds of pottery were found along with half a blue glass melon bead, the latter currently being the only certain Roman period object from the trench.

Trench 2

A 17 x 5m trench was excavated from just beyond the tail of Fort A's rampart to a point some 1m into the interior of Annexe B to the east. Not only did the trench take in the full width of the defences, but it also provided half a section through one of the major features excavated by Sir Ian Richmond and interpreted by him as an ' officer's dug out'.

Richmond had described the defences of Fort A in some detail (ibid, 22-34), having concluded that the eastern rampart only related to the first period of use that he recognized for his 'Camp A'. In the second phase he saw the eastern rampart being demolished (ibid,51) as a prelude to the enlargement of the 'camp' by the construction of earthwork B.

Richmond's description of the first phases of the defences incorporated a dumped rampart consisting of the upcast from the ditches that surrounded the earthwork without a berm to separate the rampart and ditch. He recorded the rampart as being reinforced with timbering:

'The first element therein was a line of small vertical post-holes, on the lip of the ditch, roughly spaced ten feet apart on the straight and five feet on the curves...They held...a rather small upright post; and their spacing would suggest that this in turn held a strut...the holes are too slight to have held a front line of upright boarding, with the whole weight of the rampart behind it...The real front of the rampart must therefore be sought six feet further back,... This was a continuous line of wooden uprights. They were fixed below ground, for about twenty feet either side of each gate, in a continous palisade- trench, filled with big wedging stones,...the trench was cut below the rampart, through the original turf-covered ground surface, which was bleached white,...the rampart mass had...[on the south rampart] been firm enough to retain the impression of the boarding...The third element was a line of rearward posts, stout and deep, set roughly five feet apart at the rear of the rampart, some six feet behind the palisade line (ibid,24-27).

As excavated this year (Plate 3) we found no evidence of timbering, other than a palisade along the top of the rampart, neither post-holes along the front of the rampart on the edge of the ditch, nor at the rear. A trench 1.4m wide was taken down to the level of the pre-rampart ground surface across the full width of the rampart (Plate 4) and it is possible that it could have missed Richmond's posts at 10 foot (3.04m) and 6 foot (l.82m) intervals at the front and back of the rampart respectively. However the rampart front on the edge of the ditch and the back were exposed over the full 5m width of the trench and post-holes in the positions claimed should have been seen, the more so due to the survival of Richmond's bleached layer that would have shown any intrusions clearly. Furthermore in the western two thirds of the section cut through the rampart the bleached layer was removed.

Plate 2 Archaeomagnetic dating sampling being taken from the first phase of the post-pad in the centre of the building in Trench 1.

Plate 3 Excavating the section through the eastern rampart of Fort A.

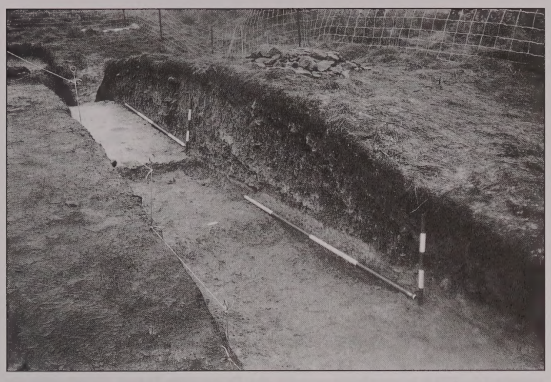

Plate 4 The north-facing section through the eastern rampart of Fort A looking south-east from the rear of the rampart towards the fort ditch.

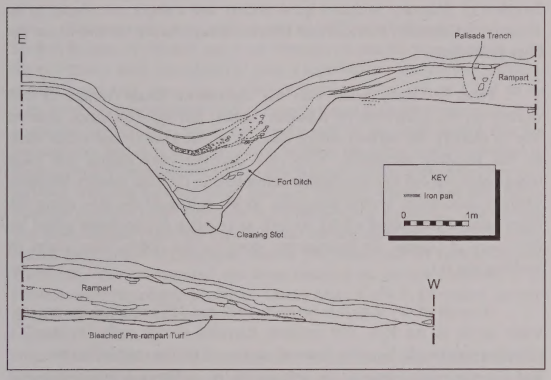

Fig 3. North-facing section through the rampart and ditch of Fort A.

What was recorded was a rampart of dumped construction (Fig.3), consisting of material derived from the ditch, with little, or no evidence for stratigraphy within its structure. It sealed a layer of dumped turves that presumably represented the stripping of the ditch. This layer survived so well that individual turves could be recognized. The rampart survived to a maximum height of 0.9m within the trench and extended 6.8m westwards from the edge of the ditch; the back gently sloping, the front (east) face showing signs of erosion that provided some of the material that filled the ditch. What is obvious in the section, and was clearly seen on the surface, is the palisade trench that ran along the top of the rampart. Contrary to Richmond's description in the area examined, the palisade trench did not penetrate 'the original turf covered ground surface'. As excavated it survived to a depth of 0.45m and was seen to be packed with stone as

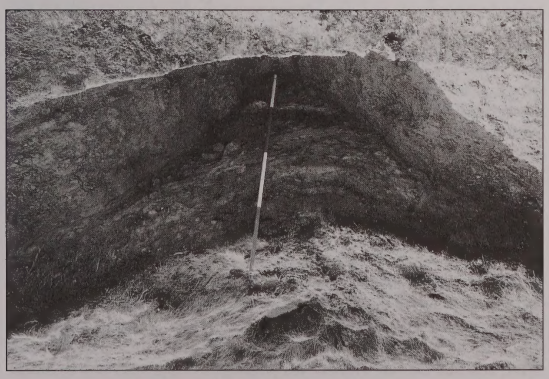

Plate 5 South-facing section through the eastern ditch of Fort A.

Richmond had noted. The ditch (Plate 5) was steep sided, 4.2m wide and 2.15m deep, with a rounded slot at the bottom that suggests it may have been cleaned out. This cleaning-out supporting the sugggestion that the fort was occupied for a period of time, rather than merely an artefact of practice work, or manoevres.

The rampart sealed a single pottery rim, probably of Iron Age date. A number of features were cut into the rampart, not least Richmond's 'officer's dug-out' number 2 (ibid pl xiv.a). This feature clearly had been left open by Richmond and allowed to refill 'naturally' as it had suffered considerable erosion. This was demonstrated by post-holes that are shown outside the feature on Richmond's plan (ibid,66), lying within it when it was re-excavated. However, when it was re-excavated it became apparent that Richmond had not emptied it completely. A slope illustrated by Richmond on its western side was shown consisting of redeposited rampart material and natural subsoil that had collapsed into the feature while it was open 'in antiquity'. The removal of this and a layer sealed by it on the bottom of the feature revealed a burnt area on the true bottom of the pit which Richmond had never seen (Plate 6). This material was also sampled for archaeomagnetic dating. Overall the pit appears to have been 3m long by a maximum of 2.4m wide (based on Richmond's plan) and 1.4m deep. It would seem clear that the feature was in fact a Grubenhaus, or sunken featured building as suggested by Graham Lee (1997,264; 1998-9,9-10) Although the archaeomagnetic date is still awaited it is likely that the Grubenhaus is later Anglian, or Anglo-Scandinavian in date (9th-11th century), the great depth of the feature being more typical of Grubenhäuser of such a date than earlier (D. Powlesland pers com). Overall the Grubenhaus would have been larger than the pit, the post-holes recorded by Richmond suggest a width of 2.8m and length of over 3.5m, to which the thickness of the (presumably) turf walls would have to be added in both cases. Such walls are illustrated by Richmond's 'cook hole of B-period' (Richmond 1932,fig.14).

Plate 6 The Grubenhaus half-sectioned. The burnt layer shows as a darker area against the section close to the right-hand ranging rod.

In addition to the 'officer's dug-out' further evidence of Richmond's excavations was encountered. Immediately south of the dug-out he had emptied part of the palisade trench along the top of the rampart and two irregular east-west cuts were found bisecting the palisade trench further south. These latter were clearly the results of his tracing of the palisade trench which was 'sought in many places' and only found to be missing at one point (ibid,27).

Trench 3

This trench was excavated to test the area between earthworks A and C. This area has variously been suggested as the location of a road skirting Camp C, or as occupied by features that constrained the plan of Camp C. In the event the 10 x 2m trench produced no archaeological features, although it did provide the Soil Scientists with a detailed profile in an area where the soils have never been mapped in detail. This will be important in their analyses as it will provide them with a model against which it will be possible to compare the samples taken from archaeological deposits in Trenches 1 and 2.

Discussion

The excavation through the rampart calls into question some of the information presented by Richmond in his 1932 publication of the site, notably the evidence for the timbering he claimed at the front and back of the rampart. However it would seem clear that he was right and there are two phases to the occupation of Fort A. This is best demonstrated by standing on the eastern rampart and looking at the northern and southern ones (the western rampart cannot be seen). The other ramparts are much higher than the eastern one and it appears probably that they were strengthened when Annexe B was added to the eastern side of Fort A. The addition of the annexe removing the need to strengthen the eastern rampart.

In the annexe, despite doubts we had at the time of the excavation, Richmond appears to have been right regarding the Roman date of the turf structures (ibid,61). They are, as he suggested, orientated on the defences of the annexe, and all the finds from Trench 1 have been shown to be Roman or earlier. Most of the parallels for the pottery are mid-late Iron Age and the one certain Roman find is half a blue glass melon bead. Surprisingly we lack the quantities of Roman material typical of most sites of the period. Given the lack of extant Roman turf buildings it is difficult to be certain what the upstanding structures might have appeared like.

The Future

The results of the work are currently being assessed, dating for the pottery sought and the archaeomagnetic dates awaited. Bulk samples of soil were taken with the objective of recovering additional artefacts and environmental evidence (especially pollen) that will further inform our understanding of the site. These are being processed and the results will feed into the assessment. The soils from the site are being examined by Dr Raimondai Usai of the Environmental Archaeology Unit, University of York, where Dr Allan Hall is examining turves from the site as part of his English Heritage funded research into turf structures. The AMS dates will take some time, if it can be demonstrated that the contexts from which they derive are suitable for dating. Once the Assessment is complete proposals will be developed for further work, although whether or not they will be accepted depends on many factors, not least the availibility of funds. Lee (1998-9) suggested a number of possible research themes for Cawthorn and this year's work has suggested more including; the early medieval period on the Tabular Hills; the investigation of dating techniques on materially impoverished sites; management of earthwork erosion and the extent of 20th century impact on the monument.

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Note;
The figures accompanying this report were prepared by Vince Griffin of the English Heritage Centre for Archaeology Graphics Studio.

John Weatherill of Rievaulx 1881 - 1960

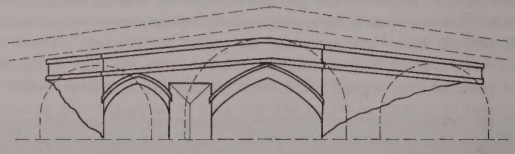
A Master Mason of Diverse Talents

by Basil Wharton

John Weatherill was born at Spout House, Bilsdale, on 18 June 1881. Both his father and grandfather were masons, and leaving school at Fangdale Beck aged 14, he became a trainee stonemason with the Duncombe Estate. Without any further formal education he acquired a good general knowledge of history, archaeology, geology, and architecture. After marrying Jane Speight of Farndale in 1910, Weatherill lived for most of his working life at the house which stands on the Scawton side of Rievaulx Bridge. After absence on military service during which he was wounded, Weatherill returned in 1919 to employment with the Duncombe Estate, transferring to the Ministry of Works when the government took responsibility for archaeology and conservation at Rievaulx. In 1950 he became one of the founders of Helmsley Archaeological Society and a major contributor to its 'History of Helmsley, Rievaulx and District' though he did not live to see the book published.

From his early years with the Duncombe Estate Weatherill had worked on the stonework of Rievaulx Abbey, and his experience enabled him to identify the various source quarries in the locality and relate them to the building sequence. Also, his detailed observations on local topography enabled him to interpret references in the 12th century Rievaulx Charters concerning several diversions to the course of the Rye along the boundaries of the Abbey's land, as well as pointing out problems posed by the theory of 'canals' for transporting stone for the Abbey from quarry to building site (1).

A series of dry summers between 1949 and 1955 resulted in very low water levels in the Rye, and crossing Rievaulx Bridge daily Weatherill's attention was caught by some unusual stones and timber exposed on the river bed. He recognized these as the remains of the medieval bridge which had been 'driven down' by the great flood of October 1754, and was able to measure and draw them whenever low water and shifting sediment permitted. He produced drawings to scale reconstructing the probable appearance of the old bridge, and by comparing masons' tool marks with those on stone from the same source used in the abbey he suggested a building date in the 13th century (2).



Medieval bridge (Plain) in relation to 18th Century bridge (Dotted)
By kind permission of the Yorkshire Archaeological Society.

John Weatherill's daughter, Mrs Mabel Garbutt, has recently presented some manuscripts and drawings of her father's to the Borthwick Institute of Historical Research. One of these which concerns St Gregory's Minster she has kindly allowed to be transcribed for the archive of the Kirkdale Research Project (3). Weatherill relates how in 1908 he was supervising repairs at St Gregory's Minster and personally took charge of removing the two sculpted Anglo-Saxon stones from the west wall and taking them into the church. He showed beyond doubt that the two stones had been inserted at the time the wall was built (see below). Also among these papers were the drawings of the stone foundations at Laskill believed to be those of Rievaulx Abbey Woolhouse, an account of which has appeared in the *Ryedale Historian* (4) A careful draughtsman, Weatherill was also a competent amateur artist, and Mrs Garbutt treasures his paintings of landscapes and buildings, especially of Rievaulx.

1. *Yorkshire Archaeological Journal* Vol.XXXVIII, pp 333-54. 'Rievaulx Abbey, the stone used in its building with notes on the means of transport, and a new study of the diversions of the River Rye in the 12th century' by J. Weatherill.
2. *Yorkshire Archaeological Journal* Vol XLI, pp 71-80 'The eighteenth century Rievaulx Bridge and its medieval predecessor' by the late Mr J. Weatherill. Edited and revised by J McDonnell.
3. Archaeology at Kirkdale. supplements to the *Ryedale Historian* nos 18, 19.
4. 'The Rievaulx Abbey Woolhouse remains at Laskill'. J. Mcdonnell in *Ryedale Historian* no 14 1988-9.

John Weatherill's account of moving the two stone slabs set in the west wall of St Gregory's Minster at Kirkdale in 1908.

'...the idea in making these notes is to set down some facts observed when they (the two grave slabs; one said to be the coffin lid of King Ethelwald, the other that of Bishop Cedd) were taken out of the west wall and placed underneath the arches of North arcade early in 1908 by the only person living now who saw the evidence to prove they had been put there by Orm's masons, and before that knowledge is lost for ever.

'The work of repairing the church in 1907 and 1908 was carried out by Mr R.P. Brotton of Bilsdale and I was foreman on that job from the start ... So the two stones were considered to have a high historic interest and therefore needed great care so as not to chip or damage them and as I had to be responsible for moving them safely I thought it best to do the work myself with a reliable labourer. We had to have extra help to get them moved into the position they had to occupy inside the building choosing men accustomed to handling heavy stones without doing any damage.; two of these men were also foremen who had finished other jobs and it being winter were working at Kirkdale just then to fill their time in till fresh jobs got started... One of them was John Handley who had been foreman among other jobs at Bilsdale new church and Carlton in Cleveland church. The other was my father, Davison Weatherill, who had worked and been foreman on several churches; ... at Newton under Roseberry, Lealholm, Danby Dale, Kirby in Cleveland, as well as on other kinds of building.

'I had been very interested in the various statements, conjectures and suppositions put forward by various authorities...about the two stones which chance had now given the opportunity to see taken out of the position they had occupied till 1908 and I meant to try and notice everything that could be useful in making a definite deduction about the time they could have been exposed to climatic conditions likely to cause decay to either runic letters or ornament, and what was observed was not accidental but a conscious endeavour to try and find out anything possessing archaeological evidence.

'It is easy for a mason or anybody having the kind of experience necessary for the purpose to distinguish if stones in a wall have been placed in their position during the original construction of the wall or whether they have been inserted at some later time; mainly by the kind of mortar used in building the wall and that used for setting the particular stones in question; and nearly to an equal degree by the way the mortar has been put into the wall and around the stone. In the first case the chances are very remote that the mortar used to sett an insertion would be the same as that used in the original construction of the wall and in the case of the two slabs at Kirkdale the mortar around them; that is top and bottom, their end joints and the core behind was exactly like the mortar used in the construction of the wall. Besides the slabs themselves one course of wall stones above them the full length and shorter lengths stepped so as there would not be any sag in the wall face were taken out as well as the stones at one end of them, that is the left hand end of that on the North,and the right hand end of that on the South tower. This was done to enable them to be got out, so therefore there was enough wall cut into to see what the mortar was like and how it had been put in, both in the wall itself and close round the slabs and it was seen that it was all the same material.

'In the second case if insertions are made into walls already built there are nearly always some small cavities or places which do not get properly filled with mortar, unless exceptional care is taken as when underpinning is being done. Such cavities are most likely to be found at the end joints and behind an inserted stone, especially in the core behind it and vary in size of hen eggs or larger according to the care and skill which has been used. There were none of such empty cavities seen around the two slabs at Kirkdale, and it was clear without any shadow of doubt they had been walled into Orm's church during the process of building and I have the utmost confidence in stating that Orm's masons placed them there where they were found prior to 1908. As the work of cutting out progressed it was looked at at intervals by the two other foremen who also examined the places after the slabs were removed and they were as convinced as I was that the stones had been put there when the wall was built.

'What has already been said about the date when the slabs were put into the West wall of Orm's church is observed fact and is for trained archaeologists to comment on and make observations but I should also like to comment about the history of these stones in the light of the evidence obtained in removing them.

'As the ornament on them is English and not later Scandinavian, they would be memorials to someone belonging to the purely Anglo-Saxon period and would either be laid at ground level or on top of a built up monument: and either inside an early church or outside, though stones with such elaborate work on them would point more to them being inside ....as they are meant to lie flat, not stand upright. Ornament on an upright stone will stand the weather better than one laid horizontal. It is likely not known if the early church was built of stone or had walls of less bulky materials but it would need a roof and therefore substantial beams to span from wall to wall. There are several crosses and memorial stones built into the walls of Orm's church but they do not prove that the earlier building was of stone. But assuming the slabs had been inside, whether the old church had stone walls, clay and wattle, or just plain wooden boards a certain amount of debris would fall on to them when the Danes destroyed the building in 867...The two slabs then could be between one and two hundred years old but if kept inside for the weather their ornament would still be fresh. If there was plenty of rubbish on top the ornament would remain fresh until Orm's builders unearthed them about 1060; that is about 190 years after the destruction of the earlier church. Assuming that the ornament was still in good condition in 1060 it had 850 years to decay sufficiently to obliterate the runes, said about 50 years previous to 1908 to have been readable. (1) It seems strange that after 800 years runes could still be read but in another 50 years had completely disappeared.

'...The evidence given here is conclusive that the slabs were put into the west wall of Orm's church when he 'hit let macan newan 'about 1060 and it is left for competent archaeologists to comment and make further or more correct deductions from this evidence.'

J. Weatherill
Rievaulx, York
March 1950

(1) Some time before 1858 the antiquarian Thomas Parker wrote 'On the tombstone of Edilwald is an elaborately carved cross surrounded with scroll work; above and beneath the stem of the cross is the inscription in ancient Runic characters, now partly worn out but enough remains so as to convince the most incredulous of Antiquarians' For a discussion of the runes see Lorna Watts in *Ryedale Historian*, XIX,1998-1999, pp 21-23.

The Editor is grateful to Mrs Mabel Garbutt for permission to reproduce John Weatherill's account of the moving of the stones.

Persecution and Persistence:

the first fifty years of Quakerism in Ryedale.

by Mary Rowlands

Few people now are aware that Ryedale was the scene of intense, if sporadic, persecution of a Nonconformist sect in the second half of the seventeenth century. Quakerism spread in our area from 1650 and here, as throughout most of England, the antagonism of Church and State continued until the Act of Toleration of 1689. The fate of the Quaker movement was closely linked to the political and religious crisis of that period.

George Fox, known as the founder of Quakerism, travelled up from the Midlands in 1651, preaching to many people who were disaffected by the practices of the church at that time. His followers at first called themselves 'Children of the Light', 'Friends in the Truth' or 'Friends of Truth'. It was a mocking Derby magistrate in 1650 who first used the nickname Quaker, which stuck to the movement and is still used of and by the Religious Society of Friends today. This journey of Fox's through the East and North Ridings preceded his travel through Wensleydale over to Lancashire and Westmorland, to the area often called the Birthplace of Quakerism, or 1652 country which was to become the heart of Quakerism over the next forty years. Fox's journeys in Yorkshire took him from the East Riding to York and then into Cleveland; thence to Staithes, Whitby, Scarborough, Malton, Pickering and into the moorland area, probably to Goathland and Egton, before going back to the East Riding. He drew people to him wherever he went, preaching in market places, churches, private houses, farmyards, orchards or from a haystack. His message; that Christ had come to teach his people himself, that the light of Christ was within the soul of every individual and there was no need of priest or church as intermediary, appealed to many of the small farmers, craftsmen, and shopkeepers who were independent minded seekers, dissatisfied with the hypocrisy of the church of that time. Fox's visit was followed by others from Quaker preachers such as Richard Farnsworth, William Dewsbury, and James Naylor who helped to establish and extend the groups. They met together regularily for worship on the basis of silence, where any individual led by God could preach and bear testimony. The strong organisation set up by Fox within a few years ensured the movement's survival through forty five years of persecution.

The following aspects of the Quaker movement brought them into conflict with Church and State:

Denial of the need for special sacraments, all life being held to be sacramental.

Denial of the special status of churches ('steeplehouses')

Refusal to pay tithes or church rates to the clergy or to give money for their services, as in baptism, marriage, or burial.

Refusal to honour any one individual above another by removal of hats or by bowing and scraping or using deferential language.

Refusal to swear oaths on the Bible, as they believed Truth was to be spoken at all times, following Christ's injunction to swear not at all.

Refusal to bear arms either themselves or through paying for a substitute.

Claiming the right to assemble anywhere and to publish Truth as God called them.

They encountered opposition of course and on many occasions physical assault from both individuals and crowds. They were brought before magistrates and ecclesiastical courts and suffered severe penalties: fines and distraints (often of goods worth much more than the fine demanded), imprisonment and banishment leading sometimes to death.

During the Commonwealth period persecution was uneven and sporadic, sometimes depending more on the initiative of individuals in different localities than on general legislation. In Ryedale priests, Thomas Hardwick at Kirkbymoorside and Thomas Flatters at Lastingham were keen to pursue Quakers. Quakers were apprehended, for travelling, under the Vagrancy Acts, and under the Blasphemy Act of 1650, and, more frequently, because of their refusal to swear an Oath abjuring the authority of the Pope and because of their refusal to pay tithes to the clergy.

After the 1660 Restoration the penal laws became even more severe largely because of the fear of Catholic plots. The strange Quakers were often regarded as allies of the Catholics and a potential threat to the State. The Quaker Act of 1662 and the Conventicle Act of 1664 penalised those refusing oaths, which meant that Quakers could be imprisoned for refusing the Oath of Allegiance as well as for refusing to swear to the truth of their own answers in court. Any meeting of more than five people (other than a household) was made illegal; on third conviction the penalty, until 1670, was Transportation. The Conventicle Act of 1664 banned all religious meetings outside the Established Church. Anyone speaking in such a meeting was very heavily fined. However the Quakers did not hide away or meet secretly and particularily after the use of well rewarded informers from 1670 they were imprisoned in large numbers.

From the early years Quakers were excellent record keepers. Detail of births, marriages and deaths were carefully kept as they were not normally included in parish records. This was particularily important in the case of marriage; the Quaker form not being recognized in law until 1661. (Several Yorkshire couples were imprisoned for not using the State's form of marriage in the 1650s, one couple for over a year.) From the early days it had been laid on Friends to send details of their sufferings at the hands of the State or church, and sometimes of individuals, to London where they were carefully collected and preserved: the folio volumes may still be accessed in the L:ibrary of the Society of Friends.

Records from the Yorkshire East and West Ridings are fuller but it is still possible to pick out a number of instances of 'sufferings' in our part of the North Riding.

In the 1650s there were instances of Quakers being imprisoned for preaching in church; e.g.

Roger Hebden of South Holme (see article in *Ryedale Historian* No XII, 1984).

Jane Wilkinson was imprisoned for fifteen months for exhorting the people in the church at Crayke, 1654,

Christopher Hutton was sent to York Gaol for a month for asserting that the tithe laws were corrupt.

The next year eight named Friends were fined for refusing to swear in the Manor Court at Crayke.

For non payment of tithes punishment went on for many years. Roger Hebden spent seven weeks in York gaol for this. Robert Pearson of Rosedale was twenty weeks in Pickering Castle in 1658, and William Wilkinson died there after more than a year's imprisonment for his testimony against tithes and for refusal to swear to his answer in the Exchequer Court. From Farndale in 1655-6 John Brooksbank and George Robinson for refusing to pay a church rate for the repair of Kirkbymoorside Church had their Bibles, articles of value, taken from them: John Somerson also had goods taken away and John Brooksbank, again, had a horse worth £3 removed for non-payment of tithe. He and his family bore their testimony year after year.

The last months of 1660, at the beginning of the Restoration period, saw more severe persecution, Friends being seized in their Meetings and then refusing to take the oath in court. Many names are recorded as being imprisoned - 100 or more from the East Riding, 126 from the North Riding. Names recognisably from this area include John Brooksbank and his sons John and William (Farndale), Roger Chapman (Aislaby) Christopher Halliday (Malton) Roger Hebden (South Holme) John Hick (Sheriff Hutton) Stephen Kiddy (Kingthorpe) William Pearson (Rosedale) Michael Pennock (Malton) James Petch, John Stockton. In only two months 535 Yorkshire Quakers were imprisoned; 505 in York Castle and 9 in the city prison; 9 in Scarborough; 6 in Hull and 9 in Ripon. It is unsurprising that five prisoners died in York Castle which was grossly overcrowded. More than 4000 Quakers were imprisoned throughout the country, at a time of panic after the rising of the Fifth Monarchy Men.

In the 1670s the Clarendon code produced severe persecution yet again. At Malton after information received from informers about at meeting held contrary to the Conventicle Act goods worth £58.4.8 were distrained from thirteen named Friends there present. At Kingthorpe near Pickering for a meeting at the house of Stephen Keddy (or Kiddy) goods worth £18 were taken from him and £21.10.0d from five other named Friends. Likewise we have details of distraints made after meetings at Glaisdale, New Malton, Sheriff Hutton, Osmotherley. The owner of the house where meetings were held was usually fined £20, another £20 could be imposed for speaking in the Meeting for Worship, and there were also fines for non-attendance at church services. It is hard to recognise quite how heavy these penalties were, but some guidance is given by the fact that a horse, essential for country living, was usually valued at £3 or £4, an ox likewise; and a cow at £2 or £3.

In 1654 Mary Brooksbank of Farndale, widow of John, was prosecuted for tithes and committed to York Castle, although an old lady. Her son John was imprisoned with her but died in prison within the year Another son, William, also died in prison. In 1683 Mary was still in prison aged 84. The old lady must have been tough: she was kept in prison for eleven years, surviving until 1689 and was buried at Lowna Burial ground in lower Farndale.

Another local Quaker, Henry Wilson of Kirkbymoorside, was treated rather differently. In 1675 he was prosecuted at the Bishop's Court 'for not going to steeplehouse to hear service and receive sacrament, as they call it'. He was decreed excommunicate and sent to prison in York. But a petition was got up by his neighbours and he was temporarily released. One of the signatories was actually the vicar, Thomas Hardwick who had probably himself started the action.

'These do humbly certify that Henry Wilson of Kirkbymoorside is a quiet neighbour, weak in body and of small state, charged with a wife and nine children, that their daily maintenance depends upon his daily liberty in selling coarse country clothes. And further we humbly certify that if he be put in prison it will much endanger his life, to the ruin of his poor family and may be the charge of this town of Kirkby we live in' One is led to realize it was the fear of responsibility for this large poor family falling on parish funds which led to this unusual petition. Unfortunately Henry did not long survive his release. He was the first Quaker to be buried in the Quaker Burial ground at Lowna in 1675. The plot was presumably given by a local Quaker, possibly a Frank from Lowna Farm as Quakers could not be buried in consecrated ground. An earlier burial place had been established at Rosedale in 1663 on ground belonging to Robert Pearson at Pryhills.

Distraint for non-payment of tithes went on through the 1670s and 80s and right on into the eighteenth century, the same people often being fined over and over again. An example is from 1684, 6th of 5th month, for a meeting at Roger Hebden's grounds when twenty Friends were fined. Roger had taken from him goods, beasts and sheep worth £26.13.4d. Others from Malton, Hutton le Hole, Kirkbymoorside, Howkeld, Wombleton, Farndale and Laskill (Bilsdale) lost pewter dishes, brass pots, woolcards, linen and hemp, shop goods, cloth, a horse, oxen, cows, sheep, hay and wheat. Often goods taken were worth more than the fine and the 'overplus' was not returned. Leonard Snowden of Kirkby for a five shilling fine had a brass clock taken worth £1.10.0d.

In this area, though not elsewhere, the 1680s saw less punishment in the form of mass or prolonged imprisonment and more an attempt to quell Quakers by depriving them of their means of livelihood as farmers, weavers, and craftsmen or small traders. Women were not spared. At Sutton on the Forest one, Mary Todd, a 'poor widow' had all her goods, bedding, and clothes, worth £21.5.1d taken away because a meeting was held in her house, her son and daughters also being fined.

The Quakers continued to meet wherever they could, in their own houses, their farmyards, orchards and open land. The first Meetinghouse was probably from 1677 in Malton, which had been the site of a large gathering of seekers in the early days. Pickering had a Meetinghouse in Undercliffe from 1675 or thereabouts. With the passing of the Toleration Act of 1689 Dissenters were allowed at last to meet for worship provided the buildings were registered at Quarter Sessions or in the Ecclesiastical Courts. Kirkbymoorside Friends Meetinghouse was built in 1690 on the present site in West End; at first a single storey thatched building, it was enlarged and improved a hundred years later. The first burials in the burial ground, now the garden, date from 1691. There was a Meetinghouse at Shallowdale near Ampleforth from 1693 and Hutton le Hole from 1698. The present Meetinghouse at Pickering, the second, was built in 1793, that at Laskill, Bilsdale (now disused) 1734, Malton (recently restored) 1823, and Helmsley (now the Arts Centre) 1812. In addition a number of other houses were registered for Quaker worship at Quarter Sessions in 1689. These were at Helmsley, Bilsdale, Kirkbymoorside, Fadmoor, Welburn, Hutton le Hole, Farndale, Rosedale, and others in Eskdale. More were added later. These were not built Meetinghouses but presumably the homes of Friends where it might be convenient to gather for worship or pastoral business. It must not be assumed that all were used continuously but once registered they could be used for special meetings as needed.

Gradually Quakers came to be accepted and respected members of local communities. Perhaps it was persecution which strengthened this movement in its early years and pushed its leaders to set up a strong organisation to hold it together. Ryedale, being a rural area, suffered less than many others in Yorkshire, but the records give interesting glimpses of individual suffering and of the persistence of these early Quakers in their witness to their vision of Truth.

London Yearly Meeting. The Great Book of Sufferings.
Besse, Joseph A Collection of the sufferings of the people called Quakers. Vol.2. London, Luke Hinde, 1753
(Facsimile of section of the above) Sufferings of early Quakers, Yorkshire 1651-90.
Quarter Sessions records York, Sessions, 1998.
Punshon, John Portrait in grey. Quaker Home Service, 1989.
Rowlands, Mary The Quakers of Kirkbymoorside and District, 1990.

Some Ryedale Place-Names[1]

by Dr Victor Watts, Grey College, Durham University

I am going to deal here with the place-names of four parishes - Helmsley, Kirkdale, Kirkby Moorside and Lastingham - and their 23 townships which lie N of the river Rye and extend from the riverside meadows up into the high moor. They are part of an area which has been inhabited since the Stone Age some 10,000 years ago although the first settlers of whose naming we can have any inkling must have belonged to one of the waves of Neolithic or Bronze Age settlers from the continent between c. 3000 and 1800 BC. They spoke a dialect of Indo-European, the prehistoric parent language of most of today's western and eastern European languages and beyond. Our knowledge of it is confined to what we can reconstruct from shared features of its modern descendants, but traces of it certainly survive in some of our river-names which are often the oldest names in any district.

The next oldest stratum of names is that of the Celtic speaking settlers of the first millenium BC, the Brigantes, whose language, British, the ancestor of modern Welsh, was dominant until the arrival of the Anglo-Saxons in the fifth century of our era. The majority of our names are, in fact, Anglo-Saxon or Old English, to use the accepted linguistic term, and date between approximately AD 450 and 900; for Ryedale, of course, belonged to the Danelaw, that part of England ceded to the Vikings who captured York in 866, made it their chief city and added their own layer of place-names to all parts of Yorkshire.

Each different wave of incomers contributed something to the place-names of England, and in the following discussion we shall continually use the linguistic terms Indo-European (IE), the hypothetical parent language of English, German, Welsh, Gaelic, Latin etc., Primitive Welsh (PrW), a late form of British and immediate ancestor of Welsh, Old English (OE) c.400-1100, Old Norse (ON), the language of the Vikings including Old West Norse, the ancestor of modern Norwegian, and Old Danish and Old East Norse, the ancestors of modern Danish and modern Swedish, and Middle English (ME) c. 1100 - 1400.

The rivers in our area are the Rye and its tributaries, Seph, Riccal, Hodge Beck, Dove, and Seven. Rye is spelled *Ria* in Latin records between 1132 and 1223 and *Rye* from 1181. It cannot be explained from any known OE or ON word and in the absence of earlier evidence can only be elucidated by comparison with other river names. The most recent writer on our oldest river names[2] compares it with the continental river names Regen, a tributary of the Danube at Regensburg, *Regana* 822; Rheinbach, a stream at Simmern in the Rhineland, *Rigenbach* 1006; Rienz, a tributary of the Eisack at Brixen, Austria, *Rienza* 1147, and Reuss, a tributary of the Aare at Brugg, Switzerland, *Riusa* 840, all of which are derived from an IE root *reg- 'wet, irrigate' with different formative suffixes, viz. *reg-an-a,*reg-in-a,*reg-ont-i-a,*reg-us-i-a. Such systems of river names are a well-known feature of early European hydronymy and another formation, *reg-i-a would account for the Yorkshire r.n. The river Rye, therefore, belongs to a very ancient system of river naming found across Europe which is taken to be evidence of very early migratory expansion pre-dating the arrival of the Celts.

The Seph is *Sef* 1170x85,1202,*Ceph(t), Cepth,*1260. If the t-forms were reliable this would be OE **sefte**, a form of soft meaning 'calm,gently flowing'; but the earliest form is *Sef* and on it lies Seave Green both of which point to ON **sef** 'a rush', Modern Dialect *seave*. A Norse river name in the Norse named Bilsdale (see below) would fit very well and in view of its monosyllabic form is preferable to seeing another pre-Celtic name, viz.*Sav-i-a like Reg-i-a on the root *sow- 'flow' as in the Croatian Save, *Savos* 1st century AD or the German Seve, *Seuina*1 203,<*Sav-in-a.

The Riccal, however, which runs parallel with the Rye for six miles like a calf following its dam is, in fact, just that as the forms show,*Ricalf* 1086,1293 (a lost manor near Riccal House in Harome and named for the river) *Rycal* 1316 etc.,' the calf of Rye', and is either an OE or an ON formation. The Dove, *Duue* 1100x3, *Duve* 1207-1308 is PrW**duβ** 'dark, brown' like the Derbyshire Dove, and its tributary, Hodge Beck, *Hodgebeck* 1577, 'Roger beck', was earlier *Redover, Redofra* 13th, *Roddover* 1322,possibly 'reed bank',OE **hrëod+ofer**, possibly PrW **rïd-duβr** 'stream ford' referring to the former ford at Kirkdale. Finally the Seven, *Sivena* 1100x13, *Si-Syvene* 1204 -1306, *Seven* 1577, is also pre-English; comparison may be made with the Welsh river name Syfynwy, a tributary of the Cleddau, which seems to be from a form *sumin- seen in some continental river names such as the Somme, *Sumina* 6th cent. AD, the two Sumènes, tributary of the Dordogne, *Simina* 12th, and tributary of the Loire, *Sumena* 1305.

In the four parishes I am dealing with there are no names from the Roman period although there are remains of a villa at Beadlam. We know, further, from material remains that the four villages date back at least to the Anglo-Saxon period: at Lastingham St Cedd founded a monastery in AD 654, there is Anglo-Saxon sculpture at Kirkby Moorside and at Kirkdale which also has a famous inscribed sundial of c.1060, and a tenth century hogback at Helmsley.

There are eight townships in Helmsley (abbreviated H below).

1. Beadlam. *Bodlum* 1086, *Budelom* 1414, *Bewdlom* 1578, *Beaudlam* 1616. The DB (Domesday Book) form (1086) reveals the meaning to have been '(the place, farm, settlement) at the buildings', the dative plural inflected form *böthlum* of OE **böthl** 'a building'. The development of this name is typical for Yorkshire dialect: North of the Humber OE [o:] became ME[ø:],[y:] and eventually [i:][3]. The precise meaning of the OE word (which appears quite frequently in names in various forms) is unknown but it is tempting to believe with Professor Rahtz that the reference here is to stone buildings of Beadlam Roman villa which must, as he says, have been visible as ruinous overgrown walls for many centuries[4].

2. Bilsdale. *Bildesdale* 1153-1316, *Bildsdale* 1577. ON **dalr**,' Bildr's valley.

3. Harome. *Harun, Harem, Harum* 1086. These are all spellings for another OE dative plural name *Harum* '(the place, farm, settlement) at the rocks' from OE **haer** 'a rock, a stone, a heap of stones'.

4. Helmsley. *Elmeslac* 1086, *Helmeslac* (h) 12th cent., *Helm(e)sley* from c. 1170, *Hem(e)sley* 1548-1665. 'Helm's woodland clearing', OE personal name *Helm*+**lëah**. In Anglian dialect areas *lëah* appeared as *lǣh* which was spelled *-lac -lach* by the DB and twelfth century scribes. The sixteenth and seventeenth century spellings show the local pronunciation.

5. Laskill. *Laueschales* 1170-1201, *Laygskales* 1301. 'The low shielings', ON **lágr + skáli**; ON *skáli* is an OWN word marking the presence of Norwegian rather than Danish settlers here.

6. Pockley. *Pochelac* 1086, *Pokelai -lay-ley* 1184-1301. 'Pocca's woodland clearing'. OE pers.n. *Pocca*+**lëah, laeh** (again with <ch>, the regular DB spelling for [k] substituted here for the OE sound [x]).

7. Rievaulx. *Rievallis* 1252, *Ryvaux* 1390. The name of the Cistercian monastery founded here in 1131. It means 'the valley of the river Rye' and is modelled on the French name of the mother house at Clairvaux (the Latin form *Rievallis* corresponds to Latin *Clara vallis* 'bright valley').

8. Sproxton. *Sprostune* 1086, *Sproxtun* (a) 1165-1202, *Sproxton* (a) from 1226. Possibly 'Sprok's estate', OE pers.n. *Sproc*+**tün**. The element *tün* means 'fence, fenced enclosure, farm, village'; its greatest period of currency corresponds with the time when the manorial system was beginning to develop and land grants were being made to individuals both English and Viking; hence the usual translation 'estate'. However the pers.n. suggested here is not actually recorded. Possibly it was ON related to ON *Sprógr*, the recorded name of a horse from ON *spróga* 'to amble' used as a nickname, or an Old Danish word *sprogh* related to ME *spray* 'brushwood, twigs', and so 'the brushwood farm'.

The four Kirkby Moorside (KM) townships are:

1. Fadmoor. *Fademor(a)* 1086-1231. 'Fada's marshy or waste land', OE pers.n. *Fada* (not actually recorded but parallel to the Old German name *Fato* and Gothic *-faths* 'man,warrior) +**mor**. OE mor was used for wet, infertile land usable primarily for rough pasture.

2. Farndale. *Farnedale* c.1153 x 63. Probably a ME coinage, 'fern valley', ME **fern** (OE *fearn*) +**dale** (ON *dalr*).

3. Gillamoor. *Gedlingesmore* 1086, *Gillingamor* late 12th, *Gillingmore* 1195 -1399, *Gillemore* 1282, Smith 1928 says OE 'open expanse of land of the Getlingas, the people called after Getla', a folk name occurring at Gilling in Rydale, (East Gilling), *Ghellinge* 1086, *Gillinga* 1157 and Gilling near Richmond (West Gilling), *Gelling(h)es* 1086, *Gillinge* c. 1090, Bede's *Ingetlingum* 'among the Getlingas'. Ekwall 1960, giving precedence to the DB spelling, preferred 'waste belonging to Gilling in Ryedale'. This would be good evidence for transhumance in this part of the world, i.e. the pasturing of the beasts of Gilling on summer pastures remote from the village. But a third explanation is possible parallel to Fadmoor, viz. 'Gedeling's waste', unrecorded pers.n. *Gedeling* from OE *gaedeling* 'a companion, a companion in arms' + **mör**.

4. Kirkby Moorside. *Chirchebi* 1086. ON **kirkju-by** 'church village'. This ON descriptive term was applied to existing English villages with a church and in many cases superseded the original English name. Kirkby Moorside undoubtedly had an English name but it was early forgotten as the term 'church village' gained currency - just as the phrase εtδ την πολιν (is tin polin) 'into town' gained currency in the form Istanbul to supersede the name Constantinople.

Kirkdale (K) has seven townships.

1. Bransdale. *Brannesdale* c. 1150, *Brauncedale* 1276, 1301, *Brandesdale* 1279x81. 'Brandr's valley', ON pers.n. *Brandr* + **dalr**. The 13th spellings are important because they show that this is a genuine Norse name and not a later ME coinage: ON *Brands dalr* became [brantsdal] with <ce> for [ts], but ME would have been *Brandes dale* pronounced [brand (i)zdal] for which <ce> spellings are impossible.

2. Kirkdale. *Chirchebi* 1086 as in Kirkby Moorside, again no doubt superseding a lost English name. *Kirkedale* 1212 is a later alternative from ME **kirk** (ON *kirkja*) and **dale***(dalr)*.

3. Muscoates. *Musecotes* 1154-1333. 'Mouse cottages', genitive pl. *müsa* of **müs**, + **cot**. Alternatively 'Musi's cottages', ON pers.n. *Músi*, genitive sing. *Músa*, +ME **cote**(OE *cot*).

4. Nawton. *Nageltune* 1086, *Nawelton* 1170, *Nawton* 1665. 'Nagli's estate', ON pers.n. *Nagli* + OE **tün**. The sound development [g]>[w] is perfectly regular as in modern English *law* from ON *lagu*. Nagli was probably the Viking overlord of the manor which almost certainly had an earlier English name before his take-over.

5. Skiplam. *Skipenum* c. 1150, *Skipnum* c. 1160, *Skiplom*(e) 1526, 1538. '(The place, farm, settlement) at the cow-sheds', dative pl. *scipenum* of OE **scipen**, 'cowhouse, shippen' with ON [sk] for *sh*.

6. Welburn. *Wellebrune* 1086. 'The spring stream', OE **wella + burna** influenced by OB *brunnr*.

7. Wombleton. *Winbeltun* 1086, *Wimbletun -ton* c. 1159-1301. OE ' Winebald or Wynbald's estate', **tun**.

And finally the four townships in Lastingham. (L):

1. Appleton le Moors, 'Appleton in the moors'. *Apeltun* 1086. 'Apple tree farm, orchard' OE **aeppel + tün**. A vogue for le names, short for French *en le*, developed in the late Middle Ages as a way of distinguishing a name and endowing it with a sort of medieval feudal cachet (see Hutton le Hole below).

2. Hutton le Hole, 'Hutton in the hollow'. *Hotun* 1086, 'the settlement besides the hill-spur', OE **höh + tün**. Also known as *Hegehoton* 'high Hutton'1204 and *Hotun subtus le Hegh* 13th, *Hewton under Heigh* 16th, 'Hutton under the height'. Hutton is a very common Yorkshire name type and *Hege* and *le Hole* were added for distinction (cf Appleton le Moors above). The village lies in a deep valley surrounded by high ridges, one of which must be the *hóh* or 'heel of high ground' of the name.

3. Lastingham. *Lesting(e)ham* 1086. This is usually explained as 'the homestead of the Laestingas, the people called after Laesta', an *-ingas* folk-name like the *Getlingas* above, genitive pl. *Laestinga,* + **häm**. But the place is called Lestinga eu c. 731 in Bede, 'the island of the Laestingas' with OE **ëg** 'island' in the sense 'patch of good ground in moorland'. Had this form survived it would have become ME *Lestinge*; *Lesting(e)ham*, therefore, looks more like 'the *häm* called or at *Lestinge*, in which *ham* meant 'estate', perhaps specifically 'monastic estate' and perhaps with reference to the restoration of the monastery by Stephen of Whitby in 1078 rather than to the original seventh century foundation which was presumably destroyed by the Danes.

4. Spaunton. *Spantun* 1086. 'Shingle farm', ON **spánn**+OE **tün**. The sense is ' place where shingles are made or obtained' rather than ' farm with shingle roof' and ON *spánn* is almost certainly a substitution for OE *spón* with the same meaning.

In addition to these township names there a couple of dozen other ancient names.

From the OE period, Bowforth (KM), *Buleford* 1154-1333, *Bouforth* 1538, 'the bull ford', **bula+ford** showing the typical northern dialect development *forth*, and a lost place in Kirkdale called *Waletun* 1086, a most interesting name since it means 'settlement,farm, hamlet of the Welsh', OE **Walh** 'a Welshman', genitive pl. *Wala* + **tun**, clearly referring to a place still occupied by descendants of the original Celtic population.

From the Viking period there are rather more survivals listed under their ON specifics:

dalr 'a valley'. Fangdale (Bilsdale), *Fangedala* c.1160. Either 'Fangi's valley' or 'the valley of the *Fangá*, the river with good fishing', ON **fang+á**.

Raisdale (Bilsdale), *Riedesdal* 1204, *Raythesdale* 1268-93, *Raisedale* 1301, 'Hreithr's valley'.

gryfja 'a ravine' Griff Farm (Rievaulx), *Grif* 1086.

haugr 'a mound' Sunley Hill K. *Sunnolvehou* 1192x9. 'Sunnólfr's burial mound.'

Urra (Bilsdale), *Horhowe* 1301. 'Dirty mound'. A ME formation with **hore**< OE *horh,horu* 'filth, dirt'.

keld 'a spring' Keldholme KM. *Keld(e)holm* 1170 etc. 'Spring meadow' with ON **holmr**.

lopt 'an upper room' Locksay House (Fadmoor), *Loftiscbo* 1282. ON phrase **lopt i skógi** 'loft in the wood'.

lundr 'wood, grove' The Lund (Spaunton), *Lund(e)* from 1154.

sletta 'flat ground, pasture' Crosslets (Bilsdale), *Kirkesletes* 1260. 'Pastures belonging to the church' Probably a ME coinage with **kirk** < ON *kirkja*.

Sleightholme (Fadmoor), *Sletholme* 1301 with ON **holmr** 'meadow'.

Sleights House (Fadmoor), *Slectes* (for *Slettes*) 1154 x 63.

svín 'pig' Swinacle Farm (Farndale), *Swenekelis* 1282. Identical with Norwegian Svinekle 'place without pigs'.

thveit 'woodland clearing, pasture' Douthwaite Hall (Hutton le Hole), *Duvanesthwat* c. 1154x63, Duvan's pasture', OIr pers.n. *Dubhan* 'the black' as in Dovenby (Cumbria), *Duuanebil* 230, *Dovannesby* 1271.

Garfit (Bilsdale), *Garthwayte* 13th 'clearing with a garth', ON *garthr*.

vík 'a bay' *Ravenswyke* KM. *Revenwich* 1201. 'Raven's nook'. Smith says 'Hrafn's nook', ON pers.n. *Hrafn*, but the earliest spelling without genitival -s points to the genitive pl. of ON **hrafn** or OE **hraefn** 'the ravens' nook'.

From amongs the multitude of farm and minor names we might point out:

Abbot Hag R, *Hagg* 1180, Greencliff Hag R, Hagg End L, Hagg Farm, KM, *Hagh* 1414, Hagg House K and Tup Hag, all with ME **hag**, 'a felling, a clearing 'from ON **hagg**-;

Brecks Wood P with ME **brek** 'land newly broken up for cultivation'.

Coning Birks P with ME **coning** 'a rabbit' and dialect **birk** 'a birch tree

Howl Wood P with ME **howl** 'a hollow' from OE *hol*.

Harland, *Harlonde* 1282, with ME **har** representing either OE *har* 'grey' or *haer* 'a heap of stones'

Middle Head Farm. *Middelhoved* 13th with ME **hoved** from ON *hofuth*.

What, then, does all this amount to? We have names which go back to prehistoric times, perhaps about 2000BC - Rye and Seven - and a few others which belong to the Celtic Iron Age - Dove and possibly *Redover* - and an OE recollection of Welsh speaking peasants at *Waletun*. But the most striking feature of these Ryedale names is the solid Anglo-Saxon stratum; an early estate at Lastingham, early topographical names at Bowforth, *Laestingaeu*; Welburn, and at Gillamoor and Fadmoor which indicate summer pastures and possibly transhumance; woodland clearance at Helmsley and Pockley; locative inflected names at Beadlam, Harome and Skiplam; specialised function names at Appleton and Spaunton and manorial names at Sproxton and Wombleton. And fossilised, as it were, in these names there are interesting OE personal names including some of great antiquity not otherwise known, Fada, Gaedeling or Getla, Helm, Laesta, Pocca, Sproc, Wine- or Wynbald.

And over all this a rich enveloping Scandinavian overlay including both purely Scandinavian names showing evidence of the currency of the Norse language, of the orgin of Norsemen from Ireland, of Norse farming practice and personal nomenclature - Bilsdale, Bransdale, Crosslets, Dowthwaite, Fangdale, Garfit, Griff, Keldholme, Kirkby, Kirkdale, Laskill, Locksay, Lund, Nawton, Raisdale, Ravenswyke, Sleightholme, Sleights, Spaunton, Sunley: English names reshaped under the influence of Norse pronunciation - Skiplam; and names which belong to the ME period but which were formed with words of Norse origin subsequently naturalised in local speech - the Hag names and names in -dale etc.

Finally one apparently surprising name, Botany Bay (Pockley). The original Botany Bay was so named by Captain Cook's naturalists in 1770; it is an inlet on the coast of New South Wales about five miles south of Sydney and was used in English naming thereafter for a very remote place in township or parish[5].

But there are scores of other names of farms and landscape features not mentioned here, partly for lack of space, partly because their history and origins are unknown. The standard book on the place- names of the North Riding of Yorkshire, A.H. Smith's English Place-Name Society's county volume for 1928, dealt only with major names. It was years before a serious study of minor names and field names was undertaken by that society and no thorough investigation of their origin and history has ever been

attempted for this county. The time is ripe for such a project and for a systematic culling of local archives, estate papers and the rich and varied holdings of the County Archive Office. It would be a most interesting and rewarding pursuit.

[1] This article is a revised version of a talk given at Helmsley in April 1999. Apart from the sources mentioned in the notes the main authorities are A.H.Smith, The place-names of the North Riding of Yorkshire, Cambridge 1928; Eilert Ekwall, English River-Names,Oxford 1960. If the suggestion made in the last paragraph of the paper should be of interest the author would be very willing to lend advice.

[2] Hans Krahe, Unsere alteste Flussnamen, Wiesbaden 1964, p.104.

[3] Martyn F. Wakelin, English Dialects, London 1972, p.88.

[4] The Ryedale Historian 19, 1998-9, 24-6. The element bothl appears variously in Harbottle, Lorbottle (Northumberland), Newbottle (Durham), Bootle (Merseyside) and with metathesis Newbold (North Midlands etc). It is related to ModE build from OE byldan <bold-i-an 'make a bold, make a dwelling' The basic root is bu-'to dwell' seen in bower, booth, ON by.

[5] See John Field, English Field Names, Newton Abbot 1972.

Rosedale Ironstone Industry East Mines:

Conservation Project 1993-96

By Graham Lee, Archaeological Conservation Officer, North York Moors National Park.

The purpose of this article is to report the continuation of the above project, which was previously reported in the Ryedale Historian (Volumes 16 and 17) and covers the period 1993-1996. It will also include additional information on the various structures and operation of the East Mines as revealed by the project and subsequent analysis. All work undertaken has been carried out with the permission of the landowner (Milburn Estate until late spring 1995; thence Faccombe Estates) with funding split equally between English Heritage and the National Park Authority.

1993 South (Stone) Kilns:

In July 1993 work commenced on the consolidation of the northernmost kiln unit of the South (stone) kilns, SE 7055 9821. (The kiln units are numbered from the north).

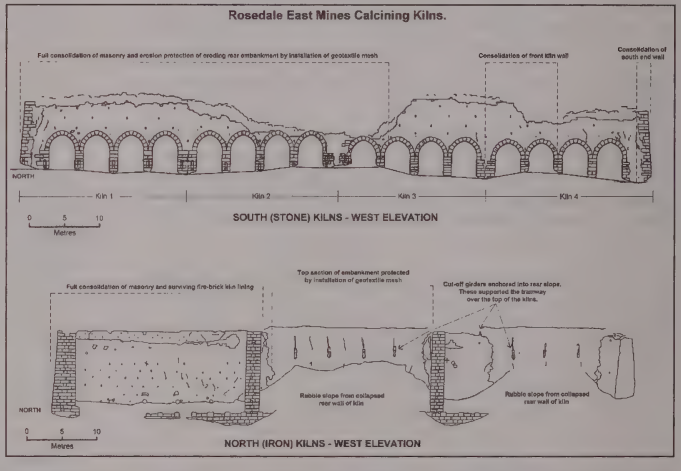


Figure 1 Western elevations of Rosedale East Mines Calcining Kilns, showing extent of consolidation/stabilisation works 1991-96. Scale 1:500. Derived from photogrammetric survey by Atkins AMC.

Background: The South Kilns comprise a row of four conjoined kiln units built into the steep hill-side between the terrace cut for the main railway line and the upper tramway. They are built of local sandstone - massive rock-faced ashlar with fielded arrises to the quoins and voussoirs, coursed squared rubble to the wall facing, and loosely mortared rubble to the wall core. The larger blocks (the voussoirs especially) are socketed for lifting dogs. Overall the structure is in excess of 90m long, curving gently in straight lengths around the hillside, except for the fourth kiln which angles more noticeably to the south-east. Their function, like the North (Iron) Kilns, was to roast the ironstone (mixed with coal in a proportion approximately 26:1) although their design and form are completely different. Each individual kiln is represented in the front of the structure by a row of 4 arches (the soffits lined with 6 layers of firebrick) through which the calcined ore was extracted, separated in some way from the other waste products which were tipped down the hill-side below the kiln (in time forming a colossal platform to the same height as the railway line).

Originally the kilns must have been at least 13 metres high, with the internal kiln dimensions measuring (approximately) 18 metres long but reducing down in width from c. 6.25 metres towards the top to only 2 metres towards the base of the kiln (ie. between the rear wall and the back of the arch piers). Like the North Kilns, our knowledge of the internal structure and operation of the South Kilns is unclear due to the lack of detailed records and the scale of the reclamation operation which occurred in the 1920s. This left a stone shell together with firebrick fittings and a number of structural iron elements which could not be removed. Internal detail of the lower levels of the structure is obscured by the depths of rubble and erosion deposits which are spilling out through the front arches down to ground level. There was also damage to the centre of the kiln from the erection of a winding engine on the pier between the second and third kiln units, again in the 1920s. This was used to reclaim the calcine dust which had been tipped down the hillside but was found to contain economically significant quantities of iron.

It is possible to make a number of suggestions regarding the operational appearance of the kilns from their surviving remains. Firstly, it is clear that there must have been some way of damping down the kiln to control the temperature given the exposed nature of the location and the prevalence of strong winds. This may have taken the form of iron doors or shuttering to the arched openings (though no remains of hinges can be discerned) together with some sort of top covering to the kiln eye into which the mixture of ironstone and coal were tipped. At the Bank Top kilns on the west side of the dale the 1893 First Edition 25" Ordnance Survey map shows the Kiln eyes as elongated rectangular openings with rounded corners which extend the length of the kiln unit. Unfortunately no such detail was available for the East Mines South Kilns. The firebrick linings of the arched openings through the front of the kilns also suggest exposure to considerable heat. In the top of each arch there appears to be some form of square flue running up the centre of the thickness of the front wall, again presumably to help control the kiln temperature. In addition, there are substantial iron girder fittings set into the side walls of the kiln arches. It is thought that they may have formed part of a working platform but from the limited information available this may never be adequately understood. A range of other fittings are visible to the front of the arch piers which require further examination and discussion.

The construction date of the South Kilns is not known although they were probably built in the 1860s or 1870s. In order to attempt to determine the development sequence of the kilns at the East Mines it is useful to review the evidence. The first recorded account of ironstone prospecting on this side of the dale was in 1834; it resumed again in the 1850s and sufficient deposits must have been discovered to justify the construction of the eastern branch of the Rosedale railway which eventually opened in 1865. There is then the vexed question of precedence of construction of the East Mines Kilns. It has generally been assumed that the South (stone) Kilns were the original, to be later replaced by the North (iron) Kilns. To this end they have been generally labelled (even on the 1912 OS Second Edition 25" sheet) the 'old' and 'new' kilns respectively. However, on a map of 1883 showing the then current extent of the underground workings, the series of drifts running back behind the North Kilns are labelled 'Old Kiln' while the drifts running back behind the South Kilns are labelled 'New Kiln'. The Condition and Conservation Report produced by the Alex Gordon Partnership in 1991 considered that it was unlikely that the construction of a vast and sophisticated kiln structure which incorporated iron chambers would be followed by a massive set of traditional kilns. It goes on to note that the base of the North/Iron Kilns makes provision for loading onto railway trucks while the base of the South/Stone Kilns does not. However, given the range of fittings which have clearly been removed from the South Kilns since they went out of use, it is not at all clear what provision may have existed there. In addition there is evidence from a doggerel poem (Owen 1994, 1-2) which tells of the collapse of a newly constructed kiln in Rosedale in 1865 before it was quite finished. This was rebuilt 'in three' rather than 'in one' and may suggest that the original design of the North Kilns was for a single large kiln compartment which suffered a dramatic failure during construction and was then rebuilt subdivided into three. This was itself a technical innovation and is the only known kiln of this type in Great Britain.

This is a problem which it may never prove possible to resolve satisfactorily. The late John Owen (1994) was of the opinion that the kilns in the dale were developed in stages, with the North Kilns built at the East Mines first, followed by (in two stages) the West Mines Kilns and finally the East Mines South Kilns. The latter certainly appear to show a progression - at Bank Top the pair of kiln units are each fronted by four arched openings, but the northern unit is clearly a later addition which has been butted against the north side of the former. Although of similar design the northern unit is longer (23m compared to 18.5m overall), the arches are wider and the internal layout appears to have been modified. At the East Mines South kilns the design is again similar but the scale much greater and the four kiln units appear to be of one build. It is necessary to remember that the magnetite from Hollins Mine, extracted from early 1856 was pure enough not to require calcination. It was the mining of the ordinary ironstone (approximately 34% iron instead of up to 60% for magnetite) that introduced the need for the kilns.

It should also be noted here that Paul Lane's (1989) survey identified a possible further kiln at Bank Top. All that remains is a massive stone wall built into the hillside just to the south of the other two Bank Top kilns. Although now in poor condition it is clearly represented on the OS 25" map edition of 1893 as a single bay with a rear retaining and short side walls, some 43 metres long. It is not clear whether this was ever completed or partly demolished but the form on the map shows closer similarities to the East Mines 'Iron' kilns than to any of the 'Stone' kilns known. The present author wonders if there is any chance that this could be the kiln referred to in the doggerel poem? If a single compartment of iron kiln type had been built here with a measured internal length of circa 39 m compared to 24.5m as built at the East Mines, it could have been very unstable.

Consolidation: South (Stone) Kilns: The northernmost kiln unit was selected as a representative sample to preserve due to its relative completeness. The aim was to consolidate as found as far as practical; where rebuilding took place for strength and structural support, this was carried out in character to match the existing remains.

Terms of reference: The majority of the conservation operations which were carried out are summarised here so as to reduce repetition. Consolidation will generally be taken to include grouting of voids in stonework to strengthen the structure, and pointing of joints in stone and brick-work to shed water and prevent frost-pockets forming. Where appropriate, coarse limestone chippings were added to the mortar mix to best emulate the existing. Where still sound, the latter was very solid indeed.

Soft-topping was used to further insulate wall tops from weather damage (particularly frost) by the positioning of a cover of turf where this could be adequately established, a practice widely utilised by English Heritage.

Northern Kiln Unit: Work commenced on the north end outer wall which had lost most of its facing stones. A small scale excavation was carried out under archaeological supervision to locate the surviving lower courses of the outer wall face. This excavation found very few facing stones in the material which had slumped down over the wall foundations. Their absence makes it likely that the facing stones had been taken down or deliberately toppled for use elsewhere. This action appears to have affected quite a number of the walls within this monument complex. As a consequence appropriate stones for the rebuilding were recovered from the stone heaps at both sets of kilns in order to the match the existing coursing.

The north end outer wall was rebuilt on the original foundations to about three-quarters of the kiln's original height. The wall core was in-filled with compacted and consolidated rubble. The wall top was left as consolidated core-work and soft-topped as appropriate.

During the course of this work scaffolding was erected around the outside and inside of the kiln compartment. This required some minor excavation to the rubble deposits along the arched openings of the front face of the kiln to reveal a firm ground surface on which to found scaffolding to the full height of the kiln. Within the kiln the scaffolding was erected upon and around the temporary timber supports and props which had been erected the previous year to prevent further deterioration to the structure. As the consolidation work proceeded the temporary supports were gradually dismantled (Plate 1).

Plate I Internal detail of northern kiln unit, South (Stone) Kilns, after consolidation, looking north, 18 November 1993. © North York Moors National Park Authority.

In addition to the general consolidation, particular areas of work involved the following:-

Front wall of kiln -Put-log holes (for the original timber scaffolding) were left open but a mortar ramp was built up inside to shed water.

- Pointing between the lower (most visible) stonework courses was sprayed off to reveal the coarse inclusions in the matrix, to resemble the original as closely as possible.

Brick arches - Missing or badly spalled firebricks were replaced as appropriate.

Front & side wall tops Unstable upper stonework was taken down and rebuilt as necessary before soft-topping. Where the condition of the existing wall top and vegetation cover was deemed to be satisfactory it was not disturbed.

Front wall, inner face Areas of upper facing stonework had become unstable and were starting to move outwards due to internal pressure. These had to be taken down and carefully rebuilt. Where facing stones had been lost lower down the wall, particularly around and above the rear of the brick arches, core work was built up in a corbel fashion to provide additional support and stability.

Rear (East) wall of kiln The surviving northern half of the wall was consolidated with the exception of the unstable upper courses (dealt with in 1995). The southern half of this wall had lost (been robbed of?) most of its facing stones; the upper section had also lost most of the core-work, had eroded back to the bedrock and was continuing to erode back into the upper turf level and sub-soil, moving towards the upper tramway. All the slipped material had buried the base of the rear wall, was filling up the kiln chamber and slipping down through the arched openings. These problems were dealt with in the 1994 and 1995 work programmes.

Second Kiln unit: The south side of the buttress wall dividing the first and second kilns, and the first arch in the front wall of the second kiln, were consolidated to provide additional stability to the above conservation work on the first kiln.

1994

Consolidation Programme: Work on the third phase of practical consolidation began in August 1994, concentrating on further works to the South Kilns and on tackling the adjacent chimney .

Ventilation Chimney (SE 7059 9821): This was the first phase of work to deal with the chimney and was satisfactorily completed within the season. Sited at the mouth of an old stone quarry at the top of the slope 14 metres above the top of the kilns and upper tramway, it had originally been added to the Schedule of Ancient Monuments as relating to the function of the kilns below. This interpretation was later questioned and revised to serving as a ventilation chimney to facilitate the circulation of fresh air into and around the underground workings. This will be discussed further below at the end of this sub-section.

Built of rough-dressed random coursed sandstone, with a rubble core, the chimney survived to a height of 8 metres but the upper stonework was very irregular and several pieces of stone were precariously balanced. Internal pressure from fallen stonework appeared to be forcing the stonework of the sides apart, revealed by deep cracks in the western face. A count from an early photograph revealed that approximately 8 courses had fallen from the top of the chimney, some 1.75 metres including all the coping stones, many of which lay on the ground around the site where they had fallen. The base dimensions of the chimney are 3.7 metres east-west and 3.7 metres north-south, with the walls up to 0.7m thick. Incorporated in the middle of the east and west sides at the base of the chimney are two small arches - that at the east side is 0.65 metres wide and 0.95 metres high, the arch formed of stone voussoirs; the western arch is c.0.92 metres wide but only 0.45 metres high, the arch formed by a mixture of stone voussoirs and a double row of fire-bricks, perhaps relating to a repair.

The view into the chimney through both of these arches revealed a mass of fallen stonework.

The first phase of work involved scaffolding the structure and then clearing (from the top, working down) the mass of stone inside the chimney (which was filled to within several metres of the top). This was cleared out to within c.30-50cm of the internal ground level but the latter was never clearly defined. All facing stones from the fill of the chimney were stored on the scaffolding for re-use.

In addition to standard consolidation (both internally and externally) the east and west walls (above the arched openings) were strengthened by the insertion of stitching anchors through the full length of the walls (by drilling, after removal of the quoins). The west wall was also pressure grouted, which, due to incorrect timing, caused some staining of the outer wall face with a tough epoxy grout. This was later carefully cleaned with a needle-gun to remove the majority of the grout without damaging the stonework. The remainder was left to weather off.

The central upper section of the west wall which was beginning to lean out between two vertical cracks was taken down and rebuilt.

The reclaimed stone from inside the chimney was used to extend the height of all four walls (both the inner and outer faces) to close to their original height, but the topping was left uneven to represent the condition to which the chimney had decayed. In the NW sector the wall was capped with several of the original coping stones to reflect in part its original appearance (Plate 2). Conservation work was completed by the installation of a lightning protection system which circles the top of the chimney and is then led to earth down the inner face and through the eastern opening, below ground.

Plate 2 Ventilation chimney from the north-east after completion of consolidation, 27 October 1994. © North York Moors National Park Authority.

With the chimney cleared of rubble it was possible to enter the interior through the eastern opening. No evidence was obtained to support the interpretation as a ventilation chimney. This would operate by the process of convection. A shaft would run down below the chimney into the underground workings and a source of hot air (either at the base of the shaft or the base of the chimney) would cause the necessary movement of fresh air to be drawn into the drifts. As noted above, excavation ceased some 30-50cm from the expected ground level within the chimney except for underneath the western arch (see below) and permission was not forthcoming from English Heritage to excavate further. (It should be noted here that the western opening is both lower in height and at a lower level than the eastern opening by some 50cm). The internal surface did appear solid enough but due to this uncertainty and the potential danger the western opening was blocked off, by walling up in line with the inner wall face (so as to be well recessed), while the eastern opening was closed off by means of a lockable grill.

Although the chimney was sited very close to one of the main drift entrances (c. 40m away to the NNW), this would not apparently preclude its function as a ventilation shaft.

Further information was revealed when the vicinity of the western arched opening was examined by a small trench excavated by the York Archaeological Trust. This was to investigate whether the arch was poorly founded and thus contributing to the cracking in the wall above. Under-pinning was considered but instead (as described above) the problem was solved by the insertion of stitching anchors through the wall. The ground was excavated both within the arch and by means of a small trench (1.76m long by 1m wide) immediately outside. The former, from the section cut in line with the inner wall face, revealed some 40cm of collapse deposits (fallen stone, mortar, sand, dust, etc, as per the material removed from above) on top of a layer, 12-16cm thick, of loose dark grey/black ashy silts and sands. This contained sandstone fragments of varying sizes. This lay on top of a layer of loose light brown sand with frequent mortar flecks, below which the excavation did not proceed. No evidence of a ventilation shaft was found, but it was considered that, if present, it may have been capped at the close of the mine, although the capping material could have degraded over the last seventy years or so (see below).

Within the arch construction it was also possible to see (from a ramped, sloping stone course, diminishing in thickness from east to west) that a fall of 12 degrees had been designed into the top of the arch. Outside the chimney the excavation revealed the significance of this when it uncovered the lower stone courses of a paved structure, some 82cm wide, running due west from the arched opening (Plate 3). This clearly represents the remains of a flue, which could then be seen to line up with some further walling several metres to the west and down the slope at the sides of a narrow and shallow gulley. This runs west down the hill before swinging away NW where it appears to terminate at a bund of excavated material to the east side of the upper tramway. This had been sited to leave a narrow depression between itself and the natural fall of the land. (These features have been noted in several places along the moorland side of the upper tramway, some quite considerable in size and cutting off what almost appear as dry ponds. These have been interpreted as water traps to control any sudden and large-scale run-off of surface water from the moor which potentially could have caused damage to the tramway). The presence of this flue appears to suggest a steam engine somewhere in this vicinity which used the chimney to vent its exhaust gases, and in fact the 1912 OS sheet shows an unexplained rectangular structure only 5 metres from the nearby arched drift entrance. In size this is only some 4 x 2.5 metres and is much smaller than the recorded engine house to the north at Day Hole (SE 7057 9867). It may not be possible to show that the two features are related but it appears to show that the chimney was at least partly designed to utilise the exhaust gases from a boiler to drive the convention process.

Plate 3 Arch in western base of ventilation chimney, showing traces of flue as revealed by York Archaeological Trust excavation, 11 August 1994. © North York Moors National Park Authority.

It was not possible at the time to clarify the nature of these remains without further investigation but additional information was acquired in 1998 when, in order to improve the lightning protection system, two 3.6 metre long earthrods were driven down inside the chimney without meeting any significant resistance. This alone would appear to confirm the existence of the ventilation shaft down into the mine drifts.

South (Stone) Kilns:

Northern Kiln Unit: Work continued in 1994 on consolidating the southern half of the rear wall, the lower portion of which was covered by a considerable mass of material which had slipped from above. Two trenches were excavated into this material, by the York Archaeological Trust, in order to locate any surviving courses of facing stones and core-work of the back wall. Having achieved this the overburden was rapidly stripped away and a level working platform created. Above the several courses of facing stones located the surviving core-work was consolidated in-situ, reinforced as required. This was possible for perhaps half the height of the back wall. Work on the upper half was deferred until 1995, although two boreholes were drilled to the rear of the kiln in order to locate and confirm the position of the bedrock.

Second Kiln Unit: Consolidation of this unit continued to further buttress the work of the 1993 season. Work was broadly similar to that undertaken on the northern kiln unit but on a reduced scale, since this kiln had not survived as well. The front wall was lower in height, reducing towards the south where the top of the voussoir of the eighth arch was actually exposed. This was due to the installation of a winding engine in the 1920s as part of the reprocessing operations, mounted on the truncated remains of the wall between the second and thirds kilns. The stone panel fronting this wall was also partly rebuilt to prevent further deterioration and to better support the stone arches to either side. A badly cracked voussoir in the 9th arch was pinned during this phase of works. This panel had similarly been damaged in the 1920s by the insertion of supports for a gantry which operated in association with the above winding engine. The panel was rebuilt with reclaimed facing stones, leaving voids where possible to show the former positions of several of the gantry supports.

1995

South (Stone) Kilns:

Northern Kiln Unit: Further stabilisation to complete the rear wall of the kiln was one of the priorities of this season's programme. This included consolidation of the final unstable section of upper walling at the north end of the rear wall. The upper part of the southern end of this wall consisted of an eroding earthen face above exposed areas of bedrock which were visible above the consolidated core-work and facing stones of the bottom section of the wall. At the top of this eroding slope the turf cover was eroding back in a slowly enlarging embayment towards the line of the upper tramway.

The upper slope erosion was dealt with by cutting back the turf cover and positioning a geotextile mesh (Enkamat) over the top metre and crest of the slope. This was firmly anchored with steel pins and the turf re-laid over the top. Where the mesh was left exposed grasses rapidly colonised the slopes and grew through the mesh, binding it to the underlying slope. This was helped by the exceptionally mild autumn and extended growing season. The mesh was also tied into the consolidated stonework at either side.

Due to the steepness of the slope, batter boards have been anchored into the slope below the mesh to act as silt traps in order to improve slope stability. This should help to reduce the amount of material washing down the slope and re-covering the lower core-work and facing stones.

In addition a small amount of re-pointing was carried out to the rear of the brick arches, and a number of voids and crevices filled in order to complete the protection against weathering. The latter operation included filling deep voids in the reveals below the brick arches. Here, and in the second kiln, a few of the large sandstone blocks had been very badly eroded. The voids were packed with mortar but finished well recessed behind the face of the stone.

Second Kiln Unit: The bank to the rear of the kiln had lost most of its stonework. Where core-work, and any facework, did survive this was consolidated. For the remainder slope erosion was controlled as per the northern kiln unit.

A number of cracked voussoirs were strengthened with stainless steel pins and surviving iron work in the walls treated with a preservative.

Third Kiln Unit: It was decided to complete the consolidation of the overall centre of the Kiln (which had been damaged and altered by the installation of the 1920s winding engine). To this end the stonework between the northerly two front arches of this kiln unit was consolidated as well as the northern arch itself (the 9th in sequence from the north end of the overall structure of the Kiln). The final timber centring which had been left in to support this arch was now removed.

North (Iron) Kilns:

The work programme for 1995 focused on two areas of work on the central of the three kiln compartments (the northern and best preserved compartment having been the subject of major works in 1992/93 - see Lee 1994-5) and comprised two elements:-

1. Consolidation of the remains of the north end of the rear wall of the kiln where it joins the previously conserved side buttress. This was considered necessary to prevent erosion damage eventually encroaching behind the buttress, due to the steepness and instability of the rear embankment, and risking destabilising the earlier consolidation work.

2. Erosion control to the top of the embankment since the top of the slope was getting close to breaking through into the course of the sunken tramway behind the kilns.

The majority of the rear retaining wall of the centre kiln compartment had collapsed (probably destabilised by ground water movement) since 1966. Only two short lengths of back wall survived at either side at the junction with the buttresses. At the north side the width of the surviving section varied between circa one metre at the top to four metres at mid-height where it was lost to view beneath collapsed material.

Work involved exposing sound lower courses of the facing stones by a small-scale excavation and then consolidating the face or core-work, according to survival, up to the full height of the wall. This included infilling a large void which had developed in the lower part of the wall and providing additional strength to a single through-stone which appeared to be carrying the weight of much of the stone-work above it. Surviving remains of the upper fire-brick lining still attached to this wall section were supported by stainless steel corbel plates and by stainless steel rods drilled through the bricks and epoxied into the back wall. The wall top was capped and pointed to ensure the run-off of rainwater.

The embankment erosion control was carried out in the same way as at the South Kilns, using a geotextile mesh (Enkamat) which was anchored in place to cover the upper embankment surface and crest of slope. At the north side the mesh was tied in to the consolidation of the stonework. Batter boards were again added to reduce surface slippage.

1996

South (Stone) Kilns

Plate 4 Internal detail of consolidation to northern end of kiln unit number 4, South (Stone) Kilns, viewed from east-south-east, 3 June 1996 © North York Moors National Park Authority

Southern Kiln Unit: A further season of work was completed to stabilise several precarious or weak areas of stonework to the front and southern end walls of the southernmost kiln unit (Plate 4). This was carried out in order to ensure the retention of the visual integrity of the sides and frontage of the monument, although it was not possible to tackle the next kiln unit to the north where the internal face of the front wall continues to deteriorate.

Railway Workers' Cottages (SE 70550 99025): In order to retain a representative example of workers' cottages which the industrial complex encompassed, the northernmost cottage of the row of eight which lies to the north of the North (Iron) Kilns was selected for consolidation. The individual cottages were 'L-shaped' in plan, divided at ground level into 3 rooms, with windows and doors both front and back, and with 2 fireplaces on each floor. They are built of rough sandstone blocks and slabs, brought to courses, with stressed quoins and bonded with mortar. Much of the latter has perished, however, and many of the walls are unstable and starting to collapse.

Work was completed by June 1996 and represented the final phase of the Rosedale East Mines consolidation project. Annual monitoring continues of the consolidated remains and of the lightning protection system fitted to the ventilation chimney.

November 1999

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The Bellasis monuments
at St Michael's Church, Coxwold

by Andrew Husband

In a paper published in the Transactions of the Monumental Brass Society, Sally Badham explored the main functions of memorials and their influence on the iconographical aspects of late medieval tomb design. (1) She took brasses and incised slabs as her subject matter. For her, the secular aspects of medieval monuments, for example, the emphasis on status and family pride, are frequently more striking than the sacred aspects. She emphasized also the role of inscriptions in detailing the life and achievements of the deceased and referred to the influence of 'the Renaissance concept of remembrance as recollection of the living person, his qualities and personality (reflecting) the growing influence of humanism'. (2) In the second section of her paper she explored the religious function of the monuments, more specifically the provision of assistance for the dead. '... a (monument) reminds us of our dear departed, so that we offer up prayers for them'... (3). The value of the prayers of the living to the purification of the dead in Purgatory was a central tenet of medieval faith. Indeed she quotes Galpern's remark that 'Catholicism at the end of the Middle Ages was in large part a cult of the living in the service of the dead' (4).

The purpose of this essay is to gain some insight into the function of memorials in Post Reformation England in order to establish how far Badham's discussion is applicable to the later period; however, whereas Badham ranged widely in time and space to find evidence to support her views only three monuments will be discussed here. These are the monuments to members of the Bellasis family which were constructed in the chancel of St Michael's church at Coxwold in North Yorkshire between 1603 and 1700.

John Weever, writing in 1633, had no doubts about the function of funeareal monuments. Sepulchres', he stated, 'should be made according to the qualitie and degree of the persons deceased, that by the tomb everyone might discern of what rank hee was living; for monuments answerable to men's birth, states and places have always been allowed, and stately sepulchres for base fellows have always lien open to jests'. At the end of the century Sir Henry Chauncy in his survey of Hertfordshire asserted that monuments 'are Evidence to prove Descents and Pedigrees' (5). Here are Badham's points about status and family pride.

Each of the three Bellasis monuments can be seen as a celebration and affirmation of rank; indeed the tombs chart the elevation of the family within the ranks of English gentility. The earliest effigy, of Sir William Bellasis, is clothed in armour thus identifying the deceased as a member of the dominant warrior class in society. William had been knighted during the reign of Queen Mary and his monument was used to highlight the knightly status of his heirs. One of the inscriptions on his tomb specifically refers to his son and grandson as 'both being knights'. His grandson, Thomas, was elevated to the peerage as Baron Fauconberg of Yarm and later acquired a viscountcy. These ranks within the peerage are inscribed on his tomb. The third monument shows the sculptured figures of Thomas's son and grandson, the latter holding the coronet of an earl (6).

Chauncy's statement that monuments were 'Evidence to prove Descents and Pedigrees' is also borne out at Coxwold. Sir William's monument is a striking display of heraldry forming 'a heraldic pedigree in the direct line from Norman times down to his own marriage' (7). There is no monument to his immediate heir in the chancel but pious and unperturbed effigies of all his children either flank his tomb or are carved on it; testimony to his success in continuing the line. The monuments to his grandson and great-grandson are further tributes to Bellasis success at procreation. These monuments, therefore, were not just memorials to individuals, they were memorials to a particular family, its lineage and its continuity. As David Howarth has said 'The tomb...can be seen as an expensive form of advertising. The product was the family, the logo: blazons, quarterings and crests' (8).

Plate 2 Thomas Viscount Fauconberg, Baron Yarm 1577-1652, and his wife, Barbara. Photo Basil Wharton

Plate 1 Sir William Bellasis 1525 – 1603, and his wife Margaret. Photo Basil Wharton

Plate 3 of 7, Henry Bellasis 1604 – 1647. Right, Thomas, 1st Earl Fauconberg 1627 – 1700. Photo Basil Wharton

The need to advertise can be understood by a brief consideration of some social developments between the late sixteenth and the turn of the seventeenth century. Keith Wrightson has reminded us that 'a steady turnover of population was a vitally important structural characteristic of local society in England' (9) Within the parish most of the children baptized there would marry and settle elsewhere and some families which migrated from another parish would not become permanent residents. Perhaps the memory of those who moved on lasted no longer than the memory of those who died, at whatever age, and were buried in the churchyard. (10). Certainly their grave would not have been marked by a permanent memorial until the late seventeenth century. Given the transience of memory, funeral monuments helped to underpin the social order by reminding local society of its permanence and thereby the rights of the social elite and the duties and obligations of their inferiors. Wrightson also refers to the 'quite deliberate and bareface efforts to shape the social consciousness of inferiors in a form consistent with the definition of the situation espoused by their superiors'. He refers, amongst other things, to the catechizing of the young whereby they were taught 'to submit myself to all my governors... to order myself lowly and reverently to all my betters' (11). Thus the Bellasis monuments could be said to play their role albeit within a local content as one of a number of ways in which the national ruling class dominated the social consciousness of their inferiors (12) Weever, it will be remembered, stated that 'stately sepulchres for base fellows have always lien open to jests' (13).

Funereal monuments were therefore devices to stress the continuity of the family line and thus the continuity of the local hierarchy. The emphasis on continuity might also have served to draw the sting of death for the dying and the bereaved. Howarth's view that 'death (was) mocked by the recumbent effigy' is strengthened by increased realism of tomb sculpture in the seventeenth century (14). In Coxwold the first viscount kneels with his wife in prayer; his son, Henry,and grandson Thomas, the second viscount and first earl, stand as if in conversation. Katherine Esdaile drew atttention to this development as long ago as 1927 asserting that 'the emphasis has shifted from death to life..." and Eric Mercer, in 1962 pointed out that a new element in the sculpture of the early seventeenth century was 'a concern for the human form and a greater freedom of pose than before'(15). It was Mercer's view that the kneeling figure served to support Protestant theology; he asserted that the kneeling figure was a device for showing that 'it was the prayers of the individual which moved heaven and earth and not those of family and community (16), however, given that monumental brasses survive from the fourteenth and fifteenth centuries which show figures kneeling before saints and the Virgin and, from the Reformation, graven images might be replaced by coats of arms or nothing at all, the tenacity of the kneeling figure despite the implicit suggestion of intercession might be explained largely in terms of its enduring popularity (17).

Before the Reformation death was not seen so much as a break or rupture but more as a passing from one form of being to another causing it to appear less fearsome to the dying. Belief in Purgatory was crucial to this view as it forged strong links between the living and the dead. (18). The tomb was a reminder to the living to pray for the dead as well as solace to the dying in that they would be remembered in the prayers of the living. This compact between the living and the dead was sundered by the Reformation. Keith Thomas has written that the consequence of 'Protestant doctrine(was that) each generation could be indifferent to the spiritual fate of its predecessor. Every individual was now to keep his own balance-sheet, and a man could no longer atone for his sins by the prayers of his descendants. This implied an altogether more atomistic conception of the relationship in which members of society stood to each other...As a modern French historian puts it, 'Life ceased to look to death for its perspective'(19).

Claire Gittings reminds us of Sir Thomas Browne's wish to pray for the dead had such an action not been 'offensive to my religion'(20). The tomb could still therefore prompt men and women whose upbringing had been in pre-Reformation England to think there might be an obligation to the dead; however its religious use was focused on the living. Symbols and inscriptions were directed to the literate and illiterate to remind them of Christian teleology and eschatology. On Sir William Bellasis's tomb are obelisks, emblems of eternity derived from classical sculpture and a skull, the symbol of death. Inscriptions draw on passages in Ecclesiastes, Proverbs and Philippians. Together these implied that William was to be remembered as one who had lived in the perspective of eternity and that his beliefs were firmly christological. Emblems of transience and eternity are to be found on the other two monuments. Only a winged cherub, and emblem of mortality, adorns the more restrained, architecturally and sculpturally of the tombs; that to the first viscount and his wife. The sculptured figures of the first earl and his father are flanked by flaming urns, symbols of eternal life;indeed all the elements in the monument form an allegory on the transient nature of status and achievement. The earl, periwigged and wearing a square cut coat, holds his coronet in his hand. His father, similarily periwigged but wearing Roman armour, the outward and visible form of immortality, disdains the earthly crown in a gesture which emphasizes the importance of the heavenly crown held above their heads by two winged cherubs (21). From the inscriptions it would appear that ability, virtue and public service appear to have become the criteria by which one was adjudged worthy of heaven.

The monument to the second viscount and his wife though close in time and space to that of the peer's grandfather is not just sculpturally and architecturally distinctive from the latter's; it suggests a different view of society. Whereas Sir William's monument and inscriptions articulate lineage and continuity the inscription on his grandson's monument emphasises loss. The viscount was prompted to commission the monument by the death of his wife in 1618 and his desire not just to publicise his love for her but also his grief. The inscription reads as follows:

> O dear ashes and sweet bones of my wife, spare me if I am slow; it pleases me to make haste. The fates themselves do not make discord between us. How I long to enter, once dead, your bedchamber. We die, but love lives and lives on for those who are buried. The fates who once snatched you away will one day return you to me.

Gittings points out that the emergence of this type of inscription in the early seventeenth century in itself is not evidence of greater depth of feeling between spouses, but of the acceptability of such expressions on a public monument (22). If Keith Thomas's view about 'the increased atomistic conception of the relationship in which members of society stood to each other' has some substance then this might be a reason why some contemporaries felt it necessary to publicise the loss of spouse and kin (23). What is clear is that the increased realism of the sculptures of the first viscount and his wife complement the greater individuality with which the deceased viscountess was commemorated. The viscount could not have prayed for his wife's soul nor have called upon their family and community to do likewise given the strength of Protestant culture in England. Before the Reformation the sense of loss might have been mitigated by the belief that intercession would benefit the soul whilst it was in Purgatory. When the reformers denied the existence of Purgatory commemoration of the dead became more pronounced and with that came more open manifestations of grief.

Badham drew on local examples to illustrate her views about the role of late medieval monuments; however, she did not explore the local context of any particular brass or group of brasses to further her discussion. Some understanding of social and economic changes consequent on the dissolution of monastic houses in the neighbourhood of Coxwold in the 1540s enables one to acquire a clearer insight into the role of the Bellasis monuments especially that dedicated to Sir William. His uncle, Anthony, one of Henry VIII's chaplains and also a commissioner for visiting religious houses and monasteries has been rewarded with Newburgh Priory. Anthony died childless but made William his heir. The priory was turned into William's seat and for over half a century he bought property in the area to establish a large estate. He acquired the neighbouring manors of Yearsley, Oulston and Yafforth, and Old Byland grange. In 1590 he bought part of the manor of Coxwold, adjacent to the priory, from William Fairfax. (25). His heir, Henry, also engaged in land buying on a major scale. In 1608, for example, he acquired the manor of Thornton on the Hill and the residue of the Coxwold manor for the sum of £8256. According to his account book Thornton and Coxwold alone were

Sir William Bellasis = Margaret (Fairfax of Gilling)
(1525 - 1603)
|
Sir Henry Bellasis* = Ursula (Fairfax of Denton)
(1555 - 1619)
|
Sir Thomas Bellasis = Barbara (Cholmeley of Roxby)
Viscount Fauconberg
(1577 - 1652)
|
Henry Bellasis = Grace Barton
(1604 - 1647)
|
Mary Cromwell (ii) = Thomas = Mildred Saunderson (i)
Second Viscount
Earl Fauconberg
(1627-1700)

*Sir Henry Bellasis' tomb monument is in York Minster

worth £650 a year while the estate which he left in 1624 was producing an income of nearly £4000 a year. (26). J.T. Cliffe has written about the Yorkshire gentry from the Reformation to the Civil War and in his view Henry Bellasis was probably the richest gentleman in the North Riding. Cliffe states that one means of emphasizing wealth and status was the maintenance of a large establishment of servants. (28). Monuments were another means; however the first Bellasis monument was also a public statement about the new order in the Coxwold area. Altar tomb,effigies, coats of arms and classical ornamentation - it was the total effect that mattered - were the symbols of the family's power and wealth. Sir William's heirs, sculputed beneath and by the side of his effigy proclaimed that the new order would continue in that family. The centures old monastic hegemony had given way to the secular pre-eminence of the Bellasis family.

Whereas the first monument was the work of a provincial mason, Thomas Browne, the monument to Thomas, the first viscount and his wife, was commissioned from Nicholas Stone, master mason to the crown, 'the outstanding master sculptor of the first half of the century' and that to his son and grandson designed and partly carved by John Nost (29). The later monuments proclaim the continuing personal and family prestige of the Bellasis; they are also testimony to a family that was able to survive the vicissitudes of civil war, post Restoration politics and the Glorious Revolution. Thomas Bellasis, the second viscount, not only married a daughter of Oliver Cromwell, but enjoyed the patronage of both Charles II and William III: he was Lord Lieutenant of the North Riding from 1660 to 1692 and Charles appointed him ambassador to the Venetian Republic and the Duke of Tuscany. William created him earl of Fauconberg in 1689. The form and style of his monument indicates both his knowledge of what constituted good taste and his status in being able to commission a monument from the leading sculptor of his time.

The monument to the first earl and his father has links with Sir William's and with pre-Reformation memorials. The inscriptions proclaim the marriage ties of both father and son; the children of Henry and their marriages are listed (30). The achievements of the two men are also celebrated. Where the Bellasis monuments differ significantly from late medieval memorials is in their religious role. No one expected the ministers and the parishioners of Coxwold whom they led in worship to intercede for the souls of the Bellasis dead or to perceive the monuments in the chancel as a reminder of obligations that would have been willingly accepted before the Reformation. As one looked at these monuments the prospect that the souls whom they commemorated were being punished would have seemed remote and improbable; indeed, did not the monument to the first earl and his father proclaim their apotheosis?

Notes.

1. S. Badham, 'Status and Salvation: The Design of Medieval English Brasses and Incised Slabs, Transactions of the Monumental Brass Society, Vol. XV, Part 5,1997, pp.413-465.
2. ibid., p.430.
3. ibid.,p.435. The quotation comes from the Register of the Grey Friars church in London.
4. ibid.
5. Weever and Chauncy are quoted by K. Esdaile in her 'English Church Monuments, 1510 to 1840' London, 1946,p.128.
6. William's son, Henry, was knighted with seventeen other members of the Yorkshire gentry by James I at York in 1603 - vide W.C. Metcalfe, 'A Book of Knights, 1426-1662', London,1885,p.139. In 1611 he was created a baronet. His only son and heir, Thomas, was created Baron Fauconberg of Yarm in 1627 and Viscount Fauconberg of Henknole County Durham in1643. The viscount was succeeded by his grandson in 1652 - vide J. Foster, 'Pedigree of the County Families of Yorkshire' Vol. III, North and East Riding, London, 1874.
7. J. Foster, op.cit.
8. D. Howarth, 'Images of Rule', London,1997, p.155.
9. K. Wrightson, 'English Society, 1580 -1680', London, 1982,p.44.
10. ibid., p.43.
11. ibid., p.60.
12. ibid., p.61.
13. supra, p.1,para 3.
14. Howarth, op.cit.,p.155.
15. K. Esdaile, 'English Monumental Sculpture since the Renaissance', London,1927, pp.60-1; E. Mercer, 'English Art 1553-1625,' Oxford University Press, 1962, p.247.
16. ibid., p.222.
17. J. Bertram (ed). Monumental Brasses as Art and History, London, 1989, p.39.
18. E. Duffy, The Stripping of the Altars:Traditional Religion in England c. 1400 - 1580, Yale University Press, 1992, pp. 338-376.
19. C. Gittings, Expressions of Loss in Early Seventeenth Century England in P.C.Jupp and G. Howarth (eds), The Changing Face of Death, 1997, p.21.
20. ibid., pp21-22.
21. Esdaile, op.cit., p.48.
22. Gittings, op.cit., p.28.
23. supra
24. Holbrooke has suggested that the 'emotional and psychological consequences of the abolition of the doctrine of purgatory and the curtailment of prayers for the dead constitute one of the great unchartable revolutions of English history'. Holbrooke, op.cit., p.36.
25. W.Page (ed), Victoria County History of the County of York, North Riding, Vol. 2, London, 1923, pp. 15, 19, 21.
26. J. T. Cliffe, The Yorkshire Gentry, London, 1969, p.96.
27. ibid., p.111.
28. ibid., p.112. In August 1609 Henry had a total of fifty one indoor and outdoor servants at Newburgh Priory and Murton Grange.
29. M. Whinney and O Millar, English Art 1625- 1714, OUP 1957,p. 106; Esdaile, Sculptors and Sculpture in Yorkshire, Part III, in The *Yorkshire Archaeological Journal*, Vol. XXXVI, Second Part, 1944, pp.138-39.
30. The earl died without an immediate heir.

Lake Pickering

by John Farquhar

Most of us have heard something about a former 'Lake Pickering': and indeed when one looks across the level valley from the Wolds or the Moors it is easy to vizualize a lake, and to see the level farmland as its bed. Professor Kendall of Leeds University gave a scientific backing to the idea in his paper, 'The Ice Age Lakes of the Cleveland Area' in 1902: he postulated a series of lakes, dammed by ice coming from the east, whose waters escaped over low points in the surrounding ice free moors and carved out the deep channels of Langdale, Forge Valley, and Newtondale as they did so. There are difficulties with Kendall's thesis and later writers have placed more emphasis on erosion by summer meltwater at the margins of the ice, or even within it. Some doubt whether a large Lake Pickering deep enough for its waters to have overtopped the col at High Hutton and escape down the Kirkham gorge ever existed.

What was the valley like before the ice came across what is now the North Sea and down the Vale of York to envelop the high ground of the North York Moors? Boreholes have revealed a buried valley at Filey 30 metres below the present sea level. Nearby bores find it at - 22 m. and it can be traced west past Ebberston to Knapton/ East Heslerton where it is 10-15 metres above sea level, well below the present ground surface. Around here it divides: its southern branch runs into the Malton embayment and is around 13 metres above sea level (7 metres below present ground level) at Norton. It must have been formed at a time when sea level was lower than at present, probably in the early stages of the most recent (Devensian) glaciation.

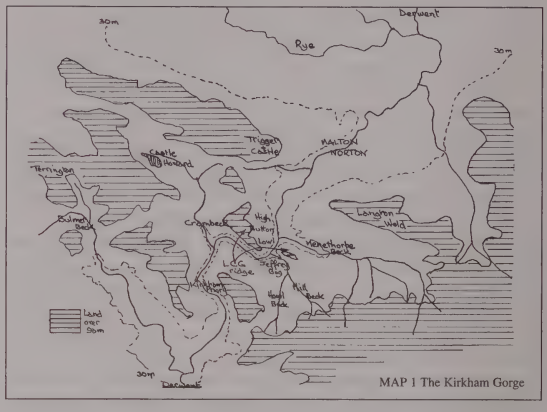
This valley has been filled up with sediments of three kinds:

a) Basal sands and gravels, patchy, often absent, but up to 6 metres in places;
b) Lower laminated clays, deepest over parts of the buried valley, up to 33m metres deep in places and shallowest in the east along the Wykeham/Sherburn line.;
c) Upper mixed laminated clays, sands and gravels. These are interbedded, grade into the Sherburn sands in the south, and contain frequent coal fragments. The upper level of these sediments is 20-23 metres above sea level i.e. not far below the present ground surface.

It seems likely that the first group of sediments precede the advance of the ice, but the laminated clays must have been deposited in an ice-dammed lake or lakes, into which sediment-laden meltwater ran each summer. Ice coming from the east advanced at least to Wykeham where there is still a prominent moraine, and a tongue of ice from the Vale of York glacier blocked the Gilling Gap in the west,leaving a moraine at Ampleforth. There was no other exit, so a lake (or Lakes) Pickering must have existed long enough for 33 metres of clay to be deposited in it. Some of the clay may be derived from the strata of Kimmeridge Clay which underlie the valley (freeze and thaw could have caused extensive slumping) and meltwater issuing from the glaciers themselves would have been heavily laden with fine sediment. (Counting the laminations or 'varves' has been used in Sweden to estimate age since a layer is deposited each summer - I do not know whether any attempt has been made to count the layers in our local deposits)

As the climate improved (warming was rapid, it seems) erosion on the high ground surrounding the valley would have become severe and the rivers draining the moors would have carried heavy loads of sediment into the valley: the coal fragments in the upper gravels must come from the Middle Jurassic rocks of the high moors. One could visualize a plain of sands and gravels, temporarily flooded by shifting streams in summer and lashed by icy winds in winter. Either the waves of summer floodwaters or the dry winds of winter could have piled up the sand which drapes the lower slopes of the Wolds from Ganton to Heslerton. Lake Pickering quickly filled up - but what happened to all the meltwater?

To the east ice or moraine and till blocked (and still block) any outlet. The Gilling Gap was also closed leaving only the low point in the Howardian Hills west of Malton as an escape route. The geology of this area is complex. It is heavily faulted being part of the Craven/Flamborough fault zone. The faults themselves are lines of weakness which streams can erode, but in addition the faulting has exposed the softer rock of the Oxford Clay and this clearly dictates the line of the Menethorpe Beck and the east-west stretch of the Derwent between Jeffrey Bog and Crambeck. These two valleys are separated by a ridge of resistant calcareous grit, currently 50+ metres high east of the Derwent and over 60 metres on the west, and I suggest that before the present river channel was cut there was a col or low point in this ridge. The pre-glacial channel east of Norton had been cut down to 13 metres above present sea level, and if one works back up the bed of a pre-glacial stream running east from Low Hutton, and including the present Menethorpe Beck and a stream draining the Castle Howard valley, one could rise by 10 metres or so - say to 23 metres - near Low Hutton. On the other, western, side of the calcareous grit ridge I suggest that a pre-glacial stream (the present Howl Beck/ Mill Beck) ran west along the fault and the Oxford Clay exposure to join Crambeck, then south towards Kirkham. A col in the Lower Calcareous Grit ridge between these streams could have been 30 metres or less above sea level. (It is also conceivable that Howl Beck/Mill Beck flowed north across a pre-glacial low point in this ridge to join the stream flowing towards Norton)



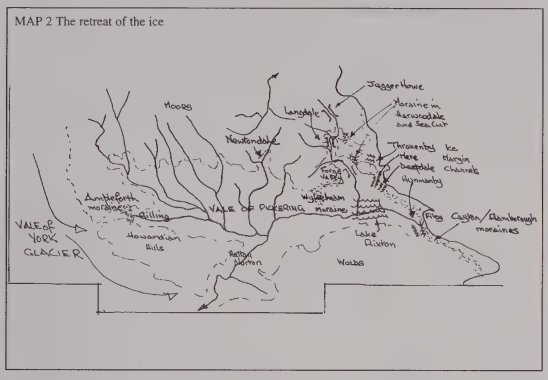
MAP 1 The Kirkham Gorge

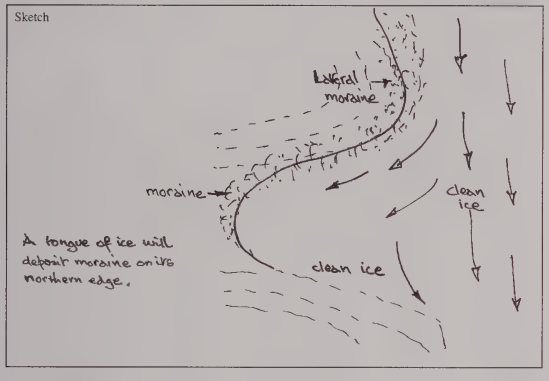
As the ice flowed down the Vale of York augmented by glaciers coming down from the Pennines, tongues and lobes invaded all the valleys and low areas west of the high ground of the Hambleton and Howardian Hills and the Wolds. We have mentioned the ice which closed the Gilling Gap and a similar lobe pushed east towards Malton. There is a well defined moraine from Brandsby to Terrington reaching over 100 metres above sea level and Bulmer Beck runs through a typical ice margin channel cut through a ridge still over 80 metres high. Boulder clay is shown on the geological map as far east as High Hutton at 70 metres; at Crambeck and Hutton Hill at over 50 metres, and at Crambe at 70 metres. On this evidence a tongue of ice could have extended as far east as the high ground of Langton Wold and Trigger Castle, and the col in the calcareous grit ridge at Hutton would have been deepened as the ice ground over it. Even if we discount the High Hutton boulder clay we may be sure that the ice reached the calcareous grit ridge, and ice margin meltwater could have deepened a pre-existing col. So I suggest that the exit from 'Lake Pickering' at Low Hutton was cut by meltwater draining to the east from a lobe of ice from the Vale of York glacier.

As this ice lobe melted and retreated the Jeffrey Bog/Crambeck/Kirkham valley was cut deeper by ice margin run-off - cut down to the softer easily - erodible Lias Shales. Summer meltwater running into the rapidly-silting 'Lake Pickering' need not have risen much above 25 metres above sea level before escaping to the west over the col once it was free of ice and as soon as a channel was established it would quickly be deepened. Once consequence was that Crambeck was able to capture the streams in the Castle Howard valley.

So I think there was a Lake Pickering which rapidly silted up and ended as an 'outwash plain' of braided river channels and temporary lakes which, once the ice tongue from the west retreated, found an exit over a low point in the lower calcareous grit ridge between Low Hutton and Jeffrey Bog. The overflowing water rapidly eroded the col and deepened the Kirkham gorge beyond and so created a new post-glacial course for the Derwent.

Meanwhile to the east there is evidence of a renewed advance of the ice, or at least a halt in its retreat (Map 2) There are moraine deposits in Harwood Dale around Burgate Farm, and in the Sea Cut valley at Thorn Park farm just high enough to keep the Derwent in its Langdale/Forge Valley course. (A





moraine of the same age at Gate Helmsley and Dunnington diverts the Derwent southwards parallel to the Ouse when it emerges from the Howardian Hills into the Vale of York) The Mere valley at Scarborough, and Deepdale on the other side of Oliver's Mount are ice-margin channels from this stage, and the sands and gravels deposited at their outlets around Seamer keep the Derwent flowing south. Glacial deposits form a ridge of high ground from Cayton to Filey, and between this and the Wolds another lake, Lake Flixton, was formed. The southern end of the Wykeham moraine was probably never very high (see sketch) and meltwater found a way out to the west, but the lake persisted. Here we find the deposits of peat which we would expect if shallow water existed in post-glacial times - there is little or no peat further west. The western part of the Vale of Pickering, despite place names such as carr' and 'ings' and 'marishes' cannot have had any persistent fens or lakes: the Kirkham outlet must always have been low enough to ' empty' the valley of its winter floods, and to enable the Derwent to continue to flow westwards from Willerby/Ganton.

This may be why traces of the Mesolithic inhabitants have been found at Star Carr and Seamer Carr in the east, but none, so far, in the west. Neolithic and Bronze Age farmers exploited the better drained and lighter soils of the Tabular Hills and the Wolds but there is evidence that the valley was used as summer grazing land - a use for the 'ings' and 'carrs' which persisted until quite recent times. Bronze Age pit alignments divide up the carrs on the south side of the vale and there is another south of Brompton. It is in the Iron Age that evidence of more intensive use appears: the fingers of higher, drier land which protrude into the western part of the valley have yielded querns, and there was a riverside settlement on Costa Beck south of Pickering. If, as some writers claim, the distribution of square barrows coincides with the territory of the Parisii then the valley was part of their land, and was not a barrier.

Nevertheless it was always difficult to cross it, especially during winter, and so the few established routes have a long history too. Malton became an important Roman settlement from which a road ran north via the high ground of Amotherby, Barugh and Riseborough towards Cawthorn. Wykeham - the western one, on a finger of better drained land near the confluence of the Rye and Derwent east of old Malton - is mentioned in Domesday Book, and the nearby Howe Bridge which carries the modern road from Malton to Pickering dates from 1150 - 1200: it may be the Friars' Bridge recorded in 1334. Yedingham provides another crossing place where traces of the Benedictine nunnery can be seen in the barn of Abbey Farm, and Foulbridge still further east is described as 'fallow since the Conquest' in 1327, suggesting that it could have been farmed at one time. This continued to be a crossing maintained by the Templars and after them, by the Hospitallers; the name Foulbridge seems to derive from a Norman called Fuel or Fulke.

The religious foundations also led the way towards the more intensive use of the valley lands: Bridlington Priory, an Augustinian Priory founded early in the 12th century, engaged in drainage works on its lands in the 13th century, the 'New Ing' at Staxton being one result. Even so, in 1773 unproductive 'low grounds' in this eastern part of the valley were estimated at 6,000 acres. High prices for corn during the Napoleonic wars led Sir George Cayley of Brompton and Sir Digby Legard of Ganton and other 'improving landlords' to try to make this land fit to grow crops, and they engaged a surveyor called William Chapman to devise a way of avoiding the regular flooding of the valley by the Derwent. Having got an Act setting up the Muston and Yedingham Drainage Board through Parliament in 1800, work began to dig the Sea Cut and build an ingenious weir to divert the Derwent floodwater down to the sea at Scalby Mills, and to give the Hartford River a new channel from Muston to Ganton. The Derwent's course from Ganton to Yedingham was straightened so that its gradient increased, and another part of Chapman's scheme was the construction of a large drain on either side of the river channel which collected water from the Wolds and the Tabular Hills and didn't discharge it into the main river until Yedingham was reached. Like many such schemes it solved the local problem by moving it elsewhere: the millers at Scalby complained of flood damage, and those at Malton either had too much water or too little.

Drainage and enclosure went together and the result can be seen in the regular fields, the network of ditches, and the well spaced farms, often brick built right across the level floor of the valley. Drainage was intensified during and after the Second World War, helped by modern machinery: one consequence was the destruction of the old bridge at Yedingham built in 1731. Now the whole valley is cropland and the summer water table has been lowered by several feet. Ings' and 'Carr' survive only as place names, except at Wheldrake Ings in the lower valley south of York preserved by the Yorkshire Wildlife Trust. I have searched in vain for surviving carr woodland - there is a patch just south of Sutton-on-the-Forest protected by Hambleton District Council as a site of local importance for nature conservation, but it is probably secondary woodland growing in old marl pits.

Acknowledgements. I am very grateful to Dr Basil Wharton for making available his abstract of an unpublished Ph.D thesis in the library of the University of Hull: 'Late Glacial and Postglacial History of the Vale of Pickering and the Northern Yorkshire Wolds', by S.W. Foster. 1984.

REVIEWS

The Christian Heritage of Ryedale.

Ryedale Christian Council. 1999. £1.00

We seem to have more visitors than ever to our churches and abbeys. Tourism is an expanding business and the millenium has quickened the pace of Christian pilgrimage which is a form of religious tourism. Our visitors have generally been able to gather some information specific to a particular site. With this pamphlet they will be able to make connections between sites and to link them into a coherent story. This is a valuable service and will make visits so much more meaningful and enjoyable.

I particularily liked the way in which the main periods of history have been linked to our major sites. It is good to have some less familiar material (I had not heard of the Kirkbymoorside martyr, John Leaf !) Quakers and Methodists figure prominently as they should and the story is brought up to date with the work of Ampleforth Abbey and the Ryedale Christian Council.

No doubt some would have wished for more of a mention in the text and Nunnington, Appleton le Street, and Middleton among other places perhaps deserved better. But as the Introduction states, this is a starting point and to have made it bulkier would have defeated its aim. As it is the compilers are to be congratulated on producing an attractive, beautifully illustrated and reasonably priced starting point. I am not surprised that it has sold very well at our major sites. Many a visitor will have gone home better informed of the Christian heritage of the area and with a fine souvenir to keep and to re-read on a winter's evening.

John M. Warden.
Vicar of Kirkdale, Harome, Nunnington and Pockley.

The Blackwell Encyclopaedia of Anglo-Saxon England.

Edited by Michael Lapidge, plus John Blair, Simon Keenes and Donald Scragg. Blackwell 1999. £80,537 pages

This is a major reference work, covering the history, archaeology, arts, architecture, literature and languages of England from the Roman withdrawal to the Norman Conquest (c. 450 -1066 AD). It comprises a series of some 700 articles by150 contributors, arranged in alphabetical order, describing the people, places, activities and creations of the Anglo-Saxons. For instance the article on Anglo-Saxon Whitby is some 50 pages long, but followed by no less than 9 further references, including our own Philip Rahtz, and Rosemary Cramp.

A flavour of the encyclopaedia is given by the letter D. There are 21 full entries, including the Danelaw, Domesday Book, 4 separate places, including Deerhurst (with reference to a paper by Philip Rahtz and Lorna Watts) and also such topics as dialects, diseases and dragons

Articles relating to Helmsley country include, apart from Whitby, Caedmon, Lastingham, St. Chad and York. There are references to the mill at Wharram Percy and a hogback grave at Ingleby Arnecliffe.

It is truly encyclopaedic : not only are there the 537 pages, but each of those are in two columns, and in small, but legible type. It is a most valuable work of reference, both in the content of the articles themselves and in the many further references given to help the assiduous scholar to follow up topics.

Pat Sutor.

APPLETON-LE-STREET: ALL SAINTS CHURCH

by Philip Rahtz, Lorna Watts and Kelly Saunders

This paper describes some new observations concerning All Saints Church, principally of its pre-Norman phases. It is argued that the nave is earlier than the two stages of the tower, and incorporated a circular window in its west gable (and possibly, originally, a similar one in its east gable). An Anglo-Scandinavian use of the church area is supported by a brooch of this period found in a small enclosure north of the church.

INTRODUCTION

Appleton-le-Street is one of the villages along the Roman road from Hovingham to Malton, known as 'The Street' (fig 1). These villages lie above the wetter areas in Southern Ryedale, on the northern slopes of the Howardian Hills. The whole area is dense in prehistoric and Roman sites, known principally from aerial photographs. The Roman sites include the well-known Hovingham villa and the nearby sub-conical Roman barrow, and the inscribed sarcophagus at East Ness. The latter identifies the only named Romans in Ryedale: Valerius Vindicianus and his wife Titia Pinta and his sons Valerius Auditor (aged 20) and Variolus (aged 15) (for all of the Roman sites, see Kitson Clark 1935, passim).

ALL SAINTS CHURCH

All Saints Church is on a prominent spur in the highest part of the village (fig 2). From its site, there is an impressive aspect to the north over the Vale of Pickering to the North York Moors, and east down to the lower parts of the Vale and eventually to the sea. The Church Guide leaflet (not dated and anonymous) suggests the possibility that there was formerly a pagan temple on the site of the church. This idea probably originated in the discovery in 1889 of Roman pottery in grave-digging on the north side of the churchyard (Corder and Kirk 1928, 74); and from a supposed Roman cemetery below the church, found in 1870 on the north side of the Roman road, in the grounds of Appleton House (fig 2) (Kitson Clark 1935, 62). Although some Roman sherds were found, there is no evidence that the cemetery was also Roman; indeed the presence of a bed of charcoal under the heads of a woman and child suggests that at least this interment was later Saxon.

The only other pre-Norman find is a circular Anglo-Scandinavian lead/copper alloy brooch (fig 3, upper). This was found in excavation (but not stratified) by Mr Firth Fairbank of Lyndhurst House, Appleton-le-Street, in a small enclosure just to the north of the churchyard (130 in fig 2). Brooches of this period are rare if not unknown in the area, though elsewhere in Yorkshire they are becoming more numerous as a result of metal-detecting. The closest parallel to the brooch is a complete example from York; not from Coppergate, but from the Wellington Row excavation, by the river. It is not yet fully published, but is illustrated on the cover of *Interim* (The York Archaeological Trust's popular news magazine), vol. 13, no 3, autumn 1988). The central part of a similar brooch was found by Mr Fairbank on the higher ground to the south of the village (also in fig 3, lower). Both brooches have parts of the pin attachments on their backs.

The period to which the brooches are assigned, while not well represented by 'small finds' such as these, is in Ryedale best-known for Anglo-Scandinavian ecclesiastical sculpture (Lang 1991) and architecture (Taylor and Taylor 1965). While there is no sculpture from Appleton-le-Street, there is some from close by at Amotherby (Lang 1991, 124-5, illustrations 419-22); but as we shall see below, we have reason to believe that All Saints Church has elements related to this period. It is thus possible that the brooch found just below the north side of the churchyard is a stray loss from the use of the church at this time.

The church area and the Roman finds are at the west end of the village. The site of the former Manor House was at the east end, together with Glebe Farm and a fine dovecote. There is also a circular earthwork on the higher ground to the south of Glebe Farm, which is said locally to be an embanked dewpond (fig 2).

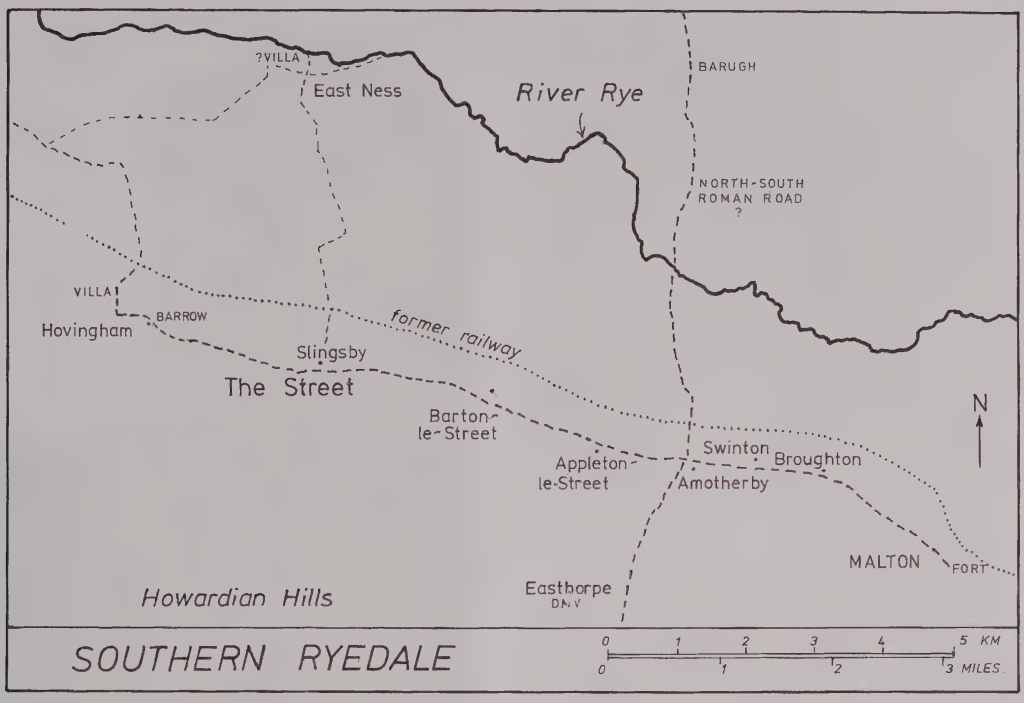


Fig. 1 Southern Ryedale

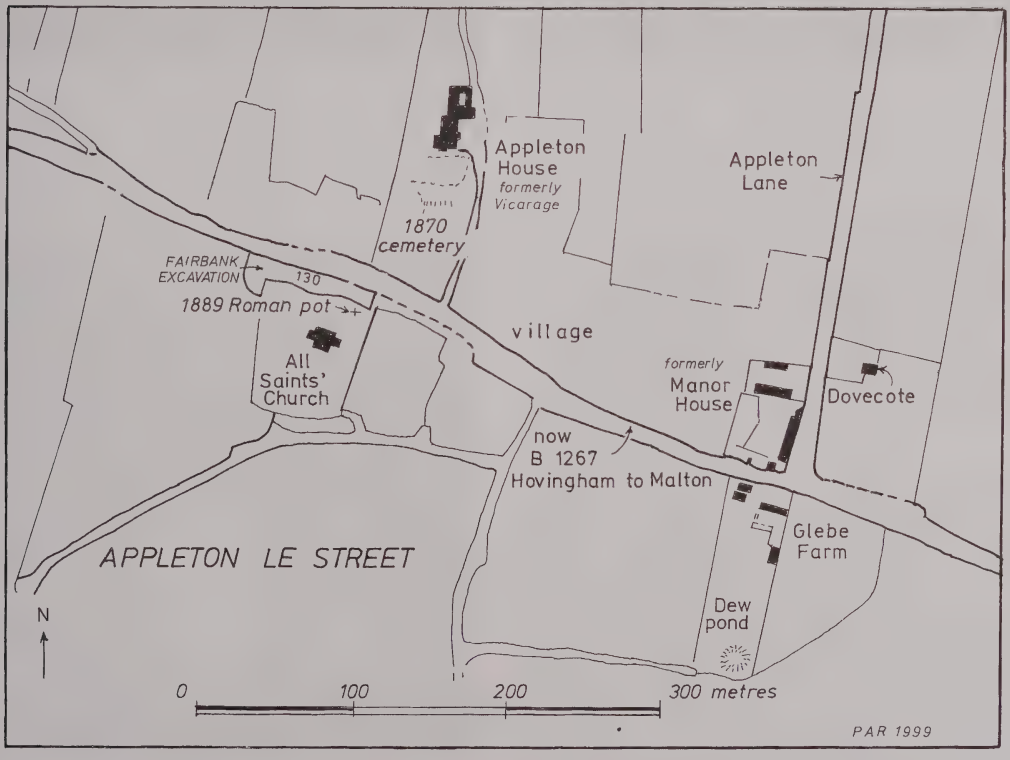


Fig. 2 Plan of Appleton-le-Street village

The structure

The church is very well-known for its splendid western tower, with its eight double belfry openings, four in each of the upper two stages (fig 4). It is usually thought of as late Anglo-Saxon work, but there is no positive dating; some architectural historians believe the tower may in fact be post-Conquest. The dedication however to All Saints could date from any time after the earlier 8th century, when it was introduced to York (Farmer 1992, 16), and it was a mother church. A full account of the late Saxon work has been compiled by the Taylors (Taylor and Taylor 1965, 28-9).

The Taylors were normally meticulous in their recording, but they show the nave as being flanked by arcades of three bays, although there are in fact only two. They assigned the lower two stages of the tower (with the lower set of belfry windows) to their period C2 (clOO0-1050) and the upper stage, with its rather more regular, smaller stone size (with the upper set of belfry windows), to their period C3 (c1050-1100). They seem to have assumed that the parts of the Anglo-Saxon nave that can be traced (see below) were part and parcel of the earlier period of building.

The full sequence has been described by Page (1914), and discussed by KS (Saunders 1999).

The plan (fig 5)

The plan of the earlier parts of the church (the nave and tower) is not rectilinear. The nave is set out as a slight parallelogram; the plan of the tower is even more accentuated. The apparent errors in setting out seem rather gross, and cannot at present be explained (e.g. by reference to earlier structures), but this is a topic that needs exploring. There is severe instability on the north side, witnessed especially by an outward lean in the north sides of the chancel and nave/tower arch. Attempts were made in earlier centuries to remedy this by building large buttresses against the north aisle. The instability is difficult to explain, given that the church should stand on rock. Perhaps there is some earlier feature on the north side into which the north side is sinking; or the instability may be linked to the cutting of the road further north again.

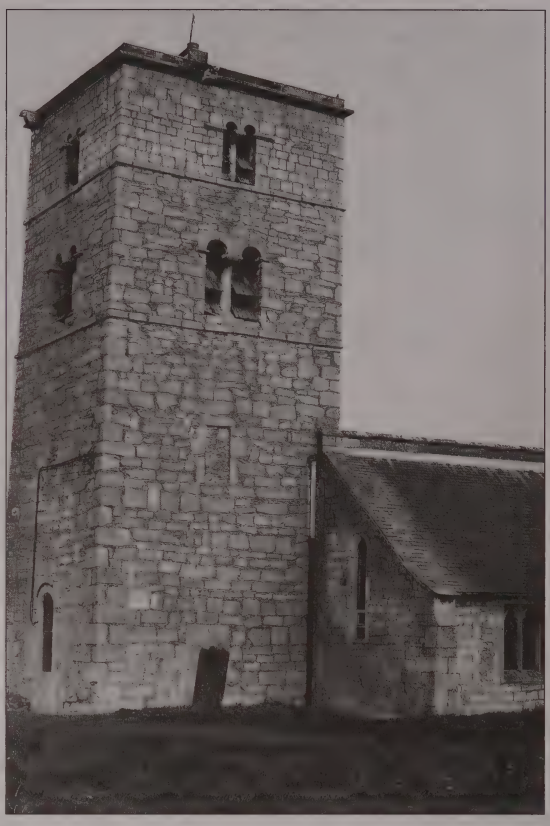


Fig. 4 All Saints Church, the tower from south-west (photo PAR)

There are earlier doorways on the west and south sides of the tower. The present entrance is by way of a north porch and a Norman doorway, into the interior of the tower. Between this and the nave is a massive arch extending the full width of the tower (fig 6); this is usually considered to be 12th century (e.g. Pevsner 1973, 24). It is not known whether there ever was a southern doorway to the nave (as would be more usual) before the 14th-century south aisle was built. Externally, there is no indication of a path turning towards the area where a south doorway might be expected.

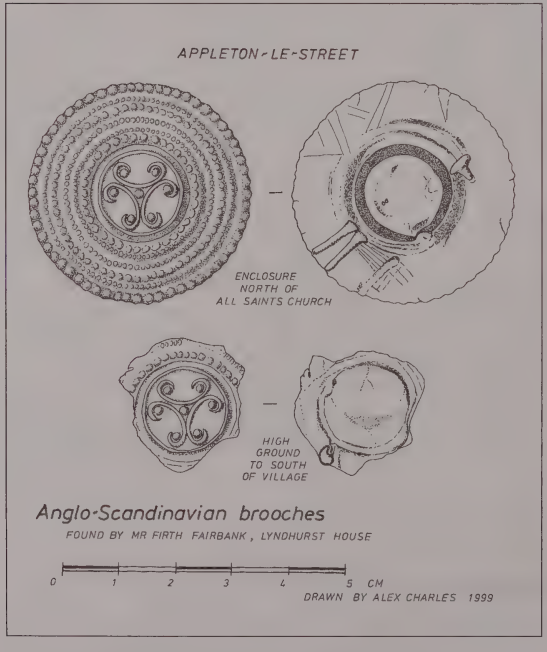


Fig. 3 Anglo-Scandinavian brooches (drawn by Alex Charles)

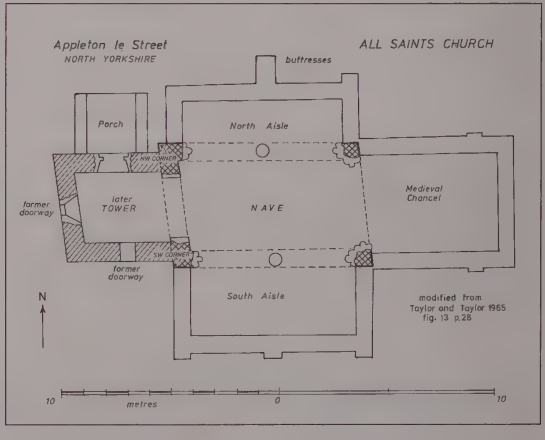


Fig. 5 Plan of church

The Anglo-Saxon nave survives at its west end as two corners projecting from the tower, with (as the Taylors assumed) two corresponding easterly corners at the junctions of chancel and aisles. The westerly projections are shown in figs 7 (the southern one) and 8 (the northern one). From these photographs, fig 9 was compiled by tracing. It will be seen that there is no continuity between the stone coursing of the nave projections and that of the adjacent tower coursing. It might be expected that some such continuity might exist if the nave and the principal (lower) part of the building were of one build, as the Taylors assumed (Taylor and Taylor 1965, fig 13, 28).

It seems, however, from their contrasting visual appearance, that the tower is secondary to the nave, at least in construction, if not being actually of a later period. That the tower is abutted is supported by the observation that, in a few places where repointing allows, a thin blade can be inserted between the courses of the nave and those of the tower. Further evidence is adduced below that the tower is indeed secondary to the nave, and of a later period. Entrance through the now-blocked west and south doors of the tower was at a lower level than present ground-level. A final point may be made in relation to the westerly projections of the nave: that they are rather diverse in the style of the stone shape and size. This may suggest that the two pieces of walling had different origins (for example, were parts of two different walls), but in the light of the small areas visible, this point cannot be pressed.

The tower has, in the lowest stage, at the level of the first floor, on the west and south sides, two blocked square-headed windows; in the north opening, a sculpture of the Virgin and Child, of 13th century date, is set in a niche which replaced the original window.

In vol. III of Anglo-Saxon Architecture, Taylor refers to three upper doorways (Taylor 1978, 800 and 834), but there is no mention of these in the earlier account in vol. I; he may have misremembered the square-headed windows. In the east wall can be seen externally, by standing well back from the south side of the church, a circular window (fig 10); the Taylors (ibid 1965, 29) noted this: 'in the east wall at the same level' (as the square-headed windows) 'above the present roof but below the line of an earlier gable, is a circular window cut through a single stone'. They did not go on to suggest why there was an earlier gable here; they must have assumed that it was contemporary with the tower; and that the circular window gave light either from the tower into the nave (which would be very slight indeed!) or vice-versa.

Fig. 6 The arch between tower and nave (photo PAR)

Fig. 7 The junction between the south wall of the tower and the south-west corner of the nave, with part of the south aisle (phot PAR)

Elevation of the east side of tower (figs 11 and 12)

In order to clarify these problems, and since it is difficult and hazardous to get onto the present lead roof (nearly flat below a high parapet) by the tower, we erected a high ladder in the angle between nave and chancel on the north side, from which photographs could be taken with a long-focus lens; not quite square-on, but slightly obliquely; but affording a better examination than from below (fig 11; fig 12 is traced from a similar photograph, and annotated). We may now consider this in more detail.

The foreground in the photograph and drawing is the present lead roof, of a shallow pitch. In the elevation of the east face of the tower, two earlier roof lines are visible; the lower has a pitch of c 45o to the horizontal. The upper one is much steeper, at a pitch of c 55o. It is presumably the lower of these that Taylor noted, as a gable, since the circular window is below its apex. The masonry within this is however different in appearance from that, of the rest of the east face of the tower; there are apparently no stones which 'cross through' the cut made to tie in the roof; this cut has been repointed, but one can see that, with a few exceptions, there are no courses that could continue at the base of the cut. The circular window is about 40-50 cm in diameter. It is made from two stones of roughly similar size (not one as the Taylors believed). The opening was the full thickness of the wall; it is splayed, with the narrower aperture on the west side of the wall. KS succeeded in getting onto the roof, and was able to examine the circular window opening closely; she confirmed its splay, and that it is blocked on the west side.

The angle of splay indicates that it was designed to pass light from the west to the east, which (as noted above) would not be very effective for lighting the nave from within a tower. Although Taylor clearly thought of it as a fourth window, it is of a fundamentally different style.

We would suggest instead that this lower roof line, the masonry it encloses, and the circular single-splay window, are not part of the tower, but are the upper part of an earlier gable. In fact this gable, we believe, belongs to the west end of the nave of an earlier church, before the present tower was added. If this hypothesis is accepted, then the tower is secondary to the nave, and not of one built with it (also see above, p. 27). The circular window, and the dating evidence it may provide, will be discussed below.

If we are correct in this conclusion, based on the differences in masonry and the function of the window, then the latter will have passed light from the west, into the nave, before the tower was built. The tower will later have been 'wrapped round' the west gable of the earlier church, and (at that time or later) the window was blocked.

We know nothing of any predecessor to the tower, such as a one- or two-storey porch, in stone or timber. The present tower was built up at least to the height of the top of the lower double belfry window. The old roof line for the nave will have been kept; the string course below the new belfry window was built just above its apex. A notch was cut in the string course to tie in its ridge (see fig 12). The notch is horseshoe-shaped and is c 5cm across. It should tell us something about the ridge of the earlier roof - of a similar shape in timber or ?lead; if so, this is a rare piece of information about the ridge of an Anglo-Saxon roof.

The tower was later substantially heightened by the addition of another string course and the upper stage. The join between the new part of the tower and the older part is apparently seamless (see fig 11); the odd flat top of the lower belfry window may be the rebuilding line. The upper double belfry windows, although smaller, are very similar in style to the lower ones. The more regular masonry, and the use of more squarish, generally

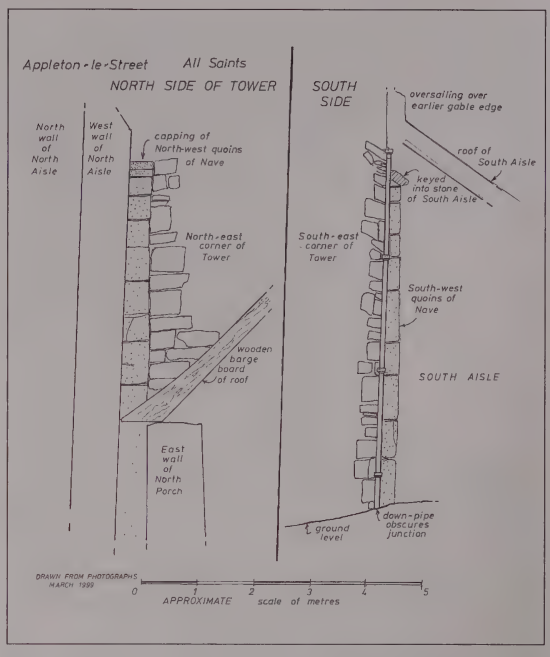


Fig. 9 The junctions of the tower and nave and the north and south sides (drawn from figs 7 and 8)

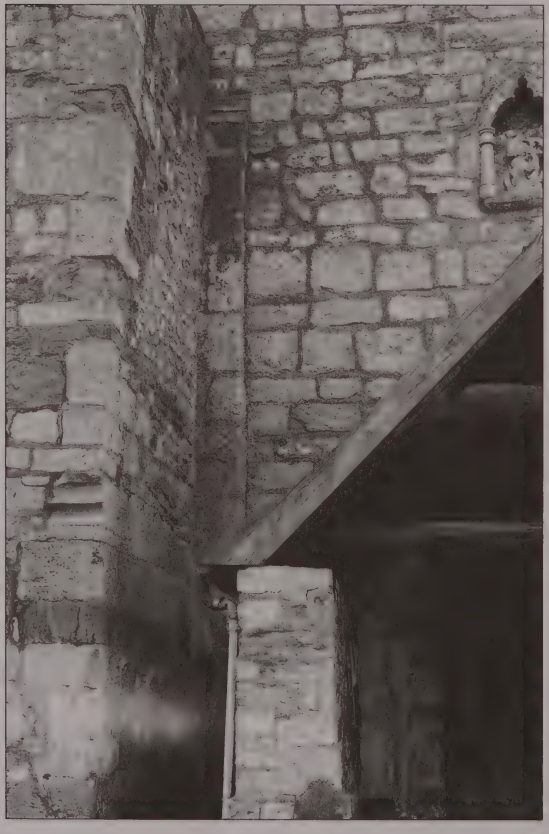


Fig. 8 The junction between the north side of the tower and the north-west corner of the nave, and part of the north aisle on the left, and the north porch on the lower right (photo PAR)

Fig. 10 The upper part of the tower, from the south-east (photo LW)

smaller, blocks, has, however, led the upper stage, as we have already noted, to be ascribed to a later date (Taylor period C3, c1050~1100, or even 12th century) (Taylor and Taylor 1965, 29). If it was later work, separated by some period of time, or a later stage in a building programme, the upper windows may have been consciously copying the lower ones. At this time, or subsequently, the lower belfry window on the east side was drastically cut by a deep groove for the end of a higher and steeper nave roof. This groove cut through the string course and jambs of the window; it did not cut into the mid-wall shaft, as this is recessed; but, again, a notch (this time in square section) was cut in the capital of the mid-wall shaft to tie in the roof ridge (see fig 12).

The circular window

Whether or not the structural and functional argument above is accepted, the circular window is of intrinsic interest. Taylor, in his third analytical volume (Taylor 1978, 853, 863), lists 57 examples of windows of this type, but Appleton-le-Street is not mentioned, although as noted above, it is described in his earlier text. Of the 57 listed by Taylor, only Avebury (3 windows), Barton, Bibury, Dover, Godalming and Strethall are outside East Anglia, so the circular window type appears to be restricted regionally. Appleton-le-Street is very much of an outlier, with no other examples (at least surviving known to us) in the north.

Of the 57 examples (two-thirds in towers), 54 are double-splayed, and only 3 single-splayed (all at Avebury). Again the single-splayed Appleton example is unusual. In general, Taylor regards double-splayed windows as being characteristic of the later Anglo-Saxon period (ibid, 836ff) and single-splay earlier. This might be taken to support our hypothesis that the masonry below the lower roof line is decisively earlier than the tower. Although Taylor does not stress the point, circular windows are frequent on Carolingian buildings abroad. A 10th century date, or even 9th, would not be impossible, leaving the lower stages of the tower as an 11th-century addition (cf. Viking-period brooch not far away).

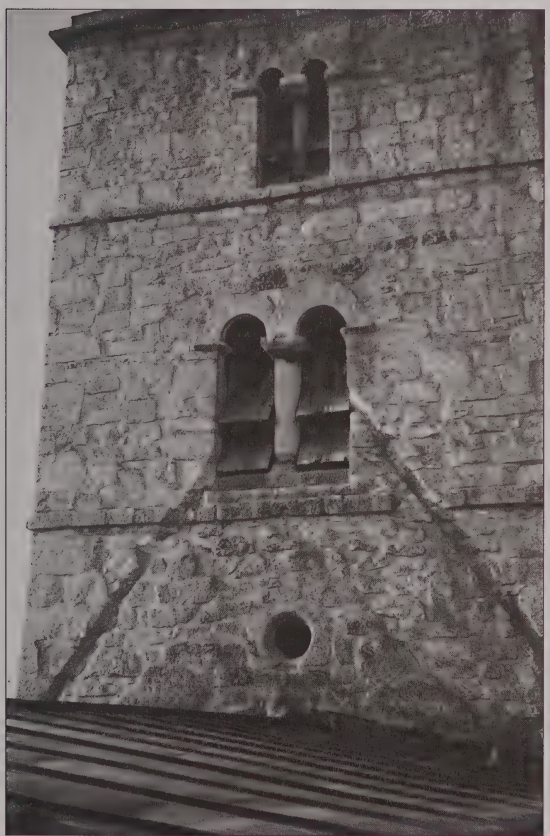


Fig. 11 The east elevation of the upper part of the tower, with the nave roof in the foreground, showing the circular window and the two earlier roof lines (photo LW) and see inside back cover.

What may be part of another circular window is to be seen an the south side of the chancel, built in as a 'hood' for a piscina, of similar size (and probably inner splay) to that in the west gable (40-50 cms). It is tempting to see this as having been part of a window in the east gable of the postulated early nave, corresponding to the existing one in the west gable; but now recut on its front and upper surfaces.

Whether such windows would have served to provide more light for the nave as such, or would, instead, have lit an upper floor space above the nave is uncertain.

The tower interior

The inside of the tower, at ground level, is the first part of the church encountered, on entering the church through the northern porch; a very large arch (fig 6) leads from here into the nave. The first floor of the tower is reached via a steep iron ladder fixed to the west part of the south wall. This floor is supported on eight 'fluted' 'Norman' corbels, probably C18 or C19. A trap-door in this wooden floor is secured by a lock.

Climbing the ladder and passing through the trap door leads one onto the first floor. The walls are whitewashed, so little is visible of the fabric, except to see there are several areas of brick repair. The plain interiors of the three lateral rectangular window-openings are seen; but no new information can be gained from these. The north one contains worked stone.

The east side should exhibit the west side of the earlier gable and circular window opening discussed above. At first sight, the patching, repointing and whitewash seemed to be obscuring these totally; but KS showed that with combinations of light sources at various angles, the outline of the gable could be discerned, its ridge just below the ceiling level at this stage; and the outline of the blocking of the circular window. This makes it clear that the tower was built directly around what was extant at the time, with no refacing or obvious keying-in of the new fabric to the old.

One then ascends a further iron ladder in the east part of the north wall through another (unlocked) trap door, which takes one to the second floor at its north-east corner, alongside the bell frame. Oddly, the two bells lie in their frame well below both sets of double-belfry windows. The sound from them, in this position, has to rise and then be deflected downwards by the slanted wooden boards in the eight openings. The inference from this would be that the bells and frame were originally higher, the sound meant to be deflected downwards through one or other of the two sets of openings. There are extensive patchings in all four walls, and there are eight small holes high up where part of an earlier frame may have been secured, now filled-in with brick (Saunders 1999, pls 5.2.3-4). From this second floor, the whole of the upper part of the tower is seen. A further iron ladder (near the south wall and at right angles to it) gives access through another trap door (with a lead cover) onto the leaded tower roof.

There is no clear evidence on the interior faces of the walls of any difference between the middle part of the tower (between the two exterior string courses) and the upper stage. They look different externally, but the interior is not as decisive because of heavy patching and repointing.

There is a piece of sculpture about 3m above the floor in the east wall of the top stage of the tower, protruding from it (fig 13). A photograph of this was examined by Dr Lawrence Butler, of the University of York, who suggests it is part of a 13th-century gable cross. The sculpture does not assist in the dating of the upper stage of the tower, since it is clearly not part of the original masonry.

The date of the tower remains uncertain, whether wholly late Saxon in two phases, or with one or both phases post-Conquest. We would argue however that the nave is likely to be late Saxon, for the reasons given above. There is nothing in the chancel fabric, either in, its present reduced form or in its longer foundations to the east, to indicate its Saxon form.

THE CHURCHYARD

The north part of the churchyard is fairly dense in gravestones. This area is where Roman pottery was found, as discussed above. In the remainder of the churchyard, to the west and south, there are few gravestones. There are, however, several prominent earthworks, both raised platforms and clear hallows, both with rectilinear features (Saunders 1999, pl 3.1.1). These were surveyed by KS, and a contour plan made (Saunders 1999, ch 4).

An almost-square anomaly in the centre of the southern area may be, KS suggests, the remains of a mausoleum, or a grave plot, surrounded by a railing. Large hollows are locally believed to be the sites of plague pits, but this was regarded by KS as unlikely, in view of their location close to the village; they could possibly be collapsed vaults.

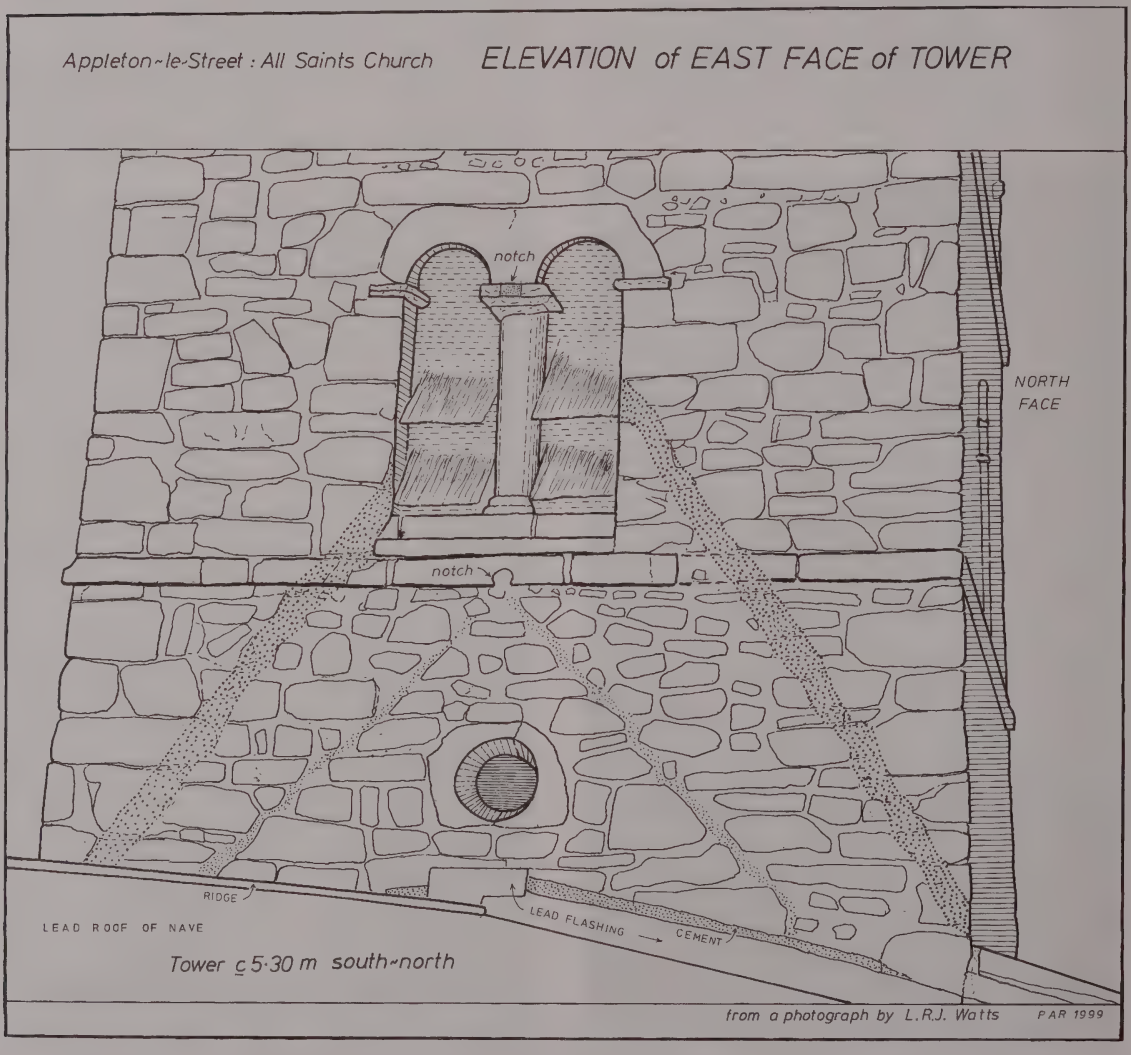


Fig. 12 Elevation of part of the east side of the tower above the nave roof (drawn by PAR from LW photos)

Fig. 13 Fragment of 13th-century sculpture in the interior face of the east wall of the tower in its uppermost stage

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(Roman figures indicate number of issue, arabic the page)

All Saints Church, Appleton le Street. The east elevation of the upper part of the tower, with the nave roof in the foreground, showing the circular window and the two earlier roof lines. See page 29 Photograph. Lorna Watts

Helmsley Market Square c.1860. From a watercolour painting first illustrated in 'A History of Helmsley, Rievaulx and District' published by Helmsley Archaeological Society in 1963. Reproduced there by kind permission of Mrs. D.B. Walker. The present Editor has not been able to trace her or the watercolour. This is from a glass slide in the John Collier Collection in the care of Helmsley Parish Council.